

<https://helda.helsinki.fi>

---

## Long-term Degree Program Success in Maritime Archaeology

Marila, Marko Mikael

Department of Cultures, University of Helsinki  
2020-12

---

Marila , M M & Ilves , K 2020 , Long-term Degree Program Success in Maritime Archaeology  
. 1. edn , Department of Cultures, University of Helsinki , Helsinki .

---

<http://hdl.handle.net/10138/324887>

---

unspecified  
publishedVersion

---

*Downloaded from Helda, University of Helsinki institutional repository.*

*This is an electronic reprint of the original article.*

*This reprint may differ from the original in pagination and typographic detail.*

*Please cite the original version.*

# Long-term Degree Program Success in Maritime Archaeology

**Marko Marila | Kristin Ilves**



# **Long-term Degree Program Success in Maritime Archaeology**

Marko Marila  
Kristin Ilves

© Authors

Marko Marila

Kristin Ilves

**Publisher's information**

Department of Cultures

Maritime archaeology

University of Helsinki

**Place of publication**

Helsinki 2020

**Design/Layout**

Riikka Hyypiä, Unigrafia Oy

**Cover image**

Jason deCaires Taylor, *Dream Collector*, 2009

© Jason deCaires Taylor. All rights reserved, DACS/Artimage  
and KUVASTO 2020. Photo: Jason deCaires Taylor

WEISELL  
SÄÄTIÖ



ISBN 978-951-51-6668-5 (print)

ISBN 978-951-51-6669-2 (PDF)

Printed at Unigrafia

# Table of Contents

---

<b>Abstract .....</b>	<b>7</b>
<b>Sammanfattning.....</b>	<b>9</b>
<b>Tiivistelmä.....</b>	<b>11</b>
 <b>1 Introduction .....</b>	 <b>13</b>
Purpose of the research and structure of the report.....	13
Terminology.....	16
 <b>2 Maritime archaeology – a general outline .....</b>	 <b>18</b>
The development of maritime archaeology as an academic discipline.....	18
Underwater cultural heritage, commercial organisations, and avocational communities.....	24
 <b>3 Pedagogical considerations for maritime     archaeology .....</b>	 <b>27</b>
Curriculum development and commodification of university teaching.....	27
Balancing between theory and practice in teaching of maritime archaeology.....	33
 <b>4 Maritime archaeology in Finland.....</b>	 <b>43</b>
Maritime archaeology and the establishment of underwater cultural heritage management in Finland .....	43

Development of higher education in maritime archaeology in Finland .....	46
<i>University of Turku</i> .....	46
<i>University of Helsinki</i> .....	48
<i>Current research and fields of expertise in Finnish maritime archaeology</i> .....	51
Commercial maritime archaeology organisations in Finland.....	52
Avocational maritime archaeology communities in Finland.....	53

## **5 Teaching and training in maritime archaeology ..... 54**

Higher education institutions in maritime archaeology globally.....	54
Selected existing maritime archaeology degree programs.....	57
<i>Leiden University</i> .....	57
<i>University of Southampton</i> .....	60
<i>Bournemouth University</i> .....	61
<i>University of Oxford</i> .....	61
<i>University of Nottingham</i> .....	61
<i>Texas A&amp;M University</i> .....	62
<i>East Carolina University</i> .....	62
<i>Flinders University</i> .....	63
<i>Alexandria University</i> .....	63
<i>University of Haifa</i> .....	64
<i>Södertörns högskola in Stockholm</i> .....	64

Selected discontinued maritime archaeology degree programs .....	65
<i>University of Southern Denmark in Esbjerg</i> .....	65
<i>Norwegian University of Science and Technology (Trondheim)</i> .....	66
<i>University College London</i> .....	67
<i>Aberdeen University</i> .....	68
<i>University of Bristol</i> .....	68
<i>University of Wales, Bangor</i> .....	69
Societies and associations with courses and training in maritime archaeology .....	69
<i>Nautical Archaeology Society</i> .....	69
<b>6 Assessment of factors contributing to long-term degree program success</b> .....	70
Online questionnaire to teaching professionals in maritime archaeology .....	70
<b>7 Conclusion – Future Directions for Maritime Archaeology at the University of Helsinki</b> .....	96
Program identity and integration of teaching .....	96
Suggestion for curriculum.....	100
<b>References</b> .....	105





# Abstract

---

A master's program in maritime archaeology is planned at the University of Helsinki with inauguration in 2023 if facilitated by the Faculty. In support of this planning, research into what factors contribute to the long-term success of a degree program in maritime archaeology was carried out. Professionals with existing and past work experience in higher education in maritime archaeology and underwater heritage management were interviewed and an online questionnaire was distributed. The interview and questionnaire results are combined in this report with a review of literature in the development of higher education in maritime archaeology.

The results indicate that the most common reason for a degree program to be cancelled is staff discontinuity. Maritime archaeology programs are often run with minimum staff and when a person retires or leaves, they may not be replaced. Two factors that can be anticipated in curriculum design were identified as important for the long-term success of a degree program in maritime archaeology. 1) Integration of teaching with other teaching at the home institution, most importantly, archaeology, heritage studies, and history, for careful balance between theory and practice. 2) Close collaboration and engagement in dialogue with other academic and non-academic institutions and communities for successful anticipation of expectations and inclusion in teaching. Drawing from these

results, the report also includes a suggestion for a curriculum in maritime archaeology.

*Keywords:* curriculum design, degree program success, Finnish maritime archaeology, higher education, history of maritime archaeology, interdisciplinarity, pedagogy

# Sammanfattning

---

Ett magisterprogram i maritim arkeologi planeras vid Helsingfors Universitet, med start 2023 om fakulteten möjliggör dess infogande. Som stöd för planeringen genomfördes en undersökning kring vilka faktorer som inverkar på ett programs framgång. Yrkesverksamma med erfarenhet i högre utbildning inom maritim arkeologi och kulturmiljövård undervatten intervjuades och en online enkät skickades ut. Resultaten från dessa kombinerades i denna rapport tillsammans med en genomgång av litteraturen kring utvecklingen av högre utbildning inom maritim arkeologi.

Resultaten indikerar att den vanligaste orsaken för ett utbildningsprogram avvecklas är bristen på kontinuitet när det gäller utbildningspersonalen. Program inom maritim arkeologi drivs oftast av minimal personalstyrka och när en person pensioneras eller lämnar universitetet, så kan det ske att de inte ersätts. Två faktorer som kan förväntas när det kommer till planeringen av läroplanen identifierades som viktiga för att nå framgång. 1) Integration i den övriga undervisningen vid hemmainstitutionen – speciellt i arkeologi, kulturarvsstudier och historia – för att uppnå en avvägd balans mellan teori och praktik. 2) Nära samarbete, engagemang och dialog med andra akademiska och icke-akademiska institutioner och grupperingar för inklusion i utbildningen samt identifikation av behov och förväntningar på läroplaners innehåll hos dessa grupper. Utgående från dessa

resultat innehåller rapporten också ett förslag på läroplan i maritim arkeologi.

*Nyckelord:* utformning av en läroplan, framgång av en läroplan, finsk maritim arkeologi, högre utbildning, historia av maritim arkeologi, tvärvetenskap, pedagogik

# Tiivistelmä

---

Helsingin yliopistossa suunnitellaan meriarkeologian maisteriohjelmää. Opetuksen sisältö valmistuu vuonna 2023, mikäli tiedekunta päättää sisällyttää opinto-ohjelman opetussuunnitelmaansa. Opetuksen suunnittelun tueksi tutkittiin, mitkä asiat vaikuttavat opinto-ohjelman pitkän aikavälin menestykseen. Osana tutkimusta haastateltiin meriarkeologian parissa työskenteleviä tai työskennelleitä suomalaisia ja kansainvälisiä ammattilaisia. Lisäksi valikoidulle kansainväliselle joukolle meriarkeologian opetuksessa työskennelleitä tai työskenteleviä ammattilaisia lähetettiin verkkokysely. Haastattelujen ja verkkokyselyn tulokset esitetään tässä raportissa yhdistettynä kirjallisuuskatsauksen pohjalta hahmoteltuihin meriarkeologian opetuksen suunnittelun periaatteisiin ja tavoitteisiin.

Tutkimuksen perusteella yleisin syy opinto-ohjelman päätymiselle on se, että eläköityvää tai toisiin tehtäviin siirtyvää henkilökuntaa ei korvata. Meriarkeologian opinto-ohjelmat koostuvat usein hyvin pienestä henkilökunnasta. Tutkimuksen pohjalta voitiin tunnistaa myös kaksi opinto-ohjelman pitkän aikavälin menestykseen positiivisesti vaikuttavaa tekijää, jotka voidaan ottaa huomioon opinto-ohjelman suunnittelussa. 1) Meriarkeologian opetuksen integroiminen samassa yliopistossa tarjottavaan arkeologian, perinnöntutkimuksen ja historian opetukseen. 2) Tiivis yhteistyö ja keskustelu muiden yliopistojen ja yliopiston ulkopuolisten toimijoiden kanssa. Raportti sisältää

myös tutkimuksen tulosten perustella laaditun ehdotuksen meri-  
arkeologian opintosuunnitelmaksi.

*Avainsanat:* menestyksellinen opinto-ohjelma, meriarkeologian historia, monitieteisyys, opetussuunnitelman kehittäminen, pedagogiikka, suomalainen meriarkeologia, yliopisto-opetus

# 1

# Introduction

---

## **Purpose of the research and structure of the report**

In 2012, a tenure track professorship in maritime archaeology was announced at the University of Helsinki. The position, originally funded by the Weisell foundation, was filled in 2014 by Marcus Hjulhammar, but was soon reopened. Kristin Ilves started as an assistant professor in 2018. With Ilves in lead, a curriculum for a master's degree in maritime archaeology is planned to be finalised in 2023.

In 2019, the Weisell foundation funded a research project to be conducted in support of the master's degree program development. The purpose of this ancillary research, carried out by postdoctoral researcher Marko Marila between October 2019 and May 2020 and summed in this project report, was to identify those factors that contribute to the long-term success of a degree program in maritime archaeology.

For this research, professionals in higher education in maritime archaeology and underwater cultural heritage management were interviewed and an online questionnaire was sent out personally to a group of professionals in universities and other institutions around the world. In addition to the results of the questionnaire and the interviews, this research draws

from existing literature on the history and theory of maritime archaeology as well as curriculum development in higher education in general and in maritime archaeology particularly. The literature provides perspectives to pedagogical considerations in maritime archaeology.

This report is divided into seven main chapters. The introductory Chapter 1 is followed by Chapter 2 that is a general outline of the history of maritime archaeology and the development of those segments of the field that have to be considered when setting up a new degree program. The chapter accounts for how maritime archaeology was born and developed as an academic discipline, and how and why the field remains divided in terms of research and teaching philosophy emphases. The chapter also considers other than academic actors such as underwater and maritime cultural heritage management, commercial organisations, and avocational communities. The aim of curriculum development is to anticipate the needs of each sector and include them in teaching.

Chapter 3 is an exposition of pedagogical concerns in higher education and in maritime archaeology. The chapter focuses on the impact of commodification on university teaching and provides a literature review on how maritime archaeology has sought to balance between teaching of academic and practical skills.

Chapter 4 provides a history of maritime archaeology, cultural heritage management, and higher education in maritime archaeology in Finland as well as a description of the current state of the field in terms of research areas, specialist expertise, the heritage management sector, private companies, and scientific and avocational societies.



The objective of Chapters 2–4 is to provide a historical account of the development of maritime archaeology internationally and in Finland, and develop a sense of historical awareness in curriculum design. Historical awareness is promoted as a method for attaining understanding of why certain disciplinary tensions exist today, how they affect interrelations in the field, and how they should be taken into consideration in planning of teaching.

Chapter 5 includes descriptions of existing and discontinued degree programs and training in maritime archaeology. The list is selective and is not meant as an exhaustive catalogue of all available teaching. Some institutions are included because they are important for the aims of this research or because they were brought up in the interviews or in the responses to the online questionnaire. Some institutions are included in the list only to provide a sense of the variety of education available in maritime archaeology.

Chapter 6 is a step-by-step analysis on the results of the online questionnaire. The results indicate that the most common reason for a degree program to be cancelled is staff discontinuity. The chapter also identifies two factors that can be anticipated in curriculum design and which can contribute positively to degree program success: collaboration with other disciplines at the home institution, and close collaboration with other academic and non-academic institutions.

Chapter 7 is a concluding summary of the key points raised in the questionnaire as well as a consideration of the identity and concentration of teaching in maritime archaeology at the University of Helsinki. Drawing from the results of the questionnaire, as well as the aspects raised in the literature review,

Chapter 7 concludes with a suggestion for a master's degree curriculum in maritime archaeology.

While this research provides results in the form of literature reviews and survey responses, its results also include the large network of contacts and collaborators with academic institutions and researchers in and outside Finland, with the national heritage sector, and with commercial companies and hobbyists that has been established during this research project.

Weisell foundation continues to fund the development of teaching and research in maritime archaeology at the University of Helsinki. Development of an open introductory online course in maritime archaeology began in June 2020, and the work done for the course is an organic continuation of the here reported project. The course aims to provide a broad understanding on maritime archaeology, and includes as lecturers and contributors many of those professionals contacted during this research.

## **Terminology**

In this report, the term *course* is used to refer to a part of a larger collection of courses rather than a complete concentration that aims to a degree diploma. This meaning of the term differs from how it is sometimes used to refer to a complete degree (O'Neill 2015, 7). The term *module* is used to denote a collection of courses that on its own will not necessarily suffice for a diploma, but which can be included in a degree. The term *degree program* is used to refer to a complete collection of courses and modules that result in a degree diploma, such as BA, BSc, MA, MSc, or PhD. Because not all maritime archaeologist graduate from a

stand-alone maritime archaeology degree program, but rather take individual courses and modules in maritime archaeology, the term *marking* is used to indicate a degree with specialisation in maritime archaeology.

The meaning of the term *long-term* is purposefully left vague and should be understood as a loose concept that refers to the general viability and longevity of a degree program. In this sense, and in light of the contributing factors highlighted in this report, one possible definition is that a degree program is successful in the long run if it is not defined as short-term at the outset and if it survives retirement or leaving of staff.

## 2

# Maritime archaeology – a general outline

---

### **The development of maritime archaeology as an academic discipline**

Compared to archaeology in general, the intensive professionalisation of which happens in the course of the 19th century, maritime archaeology is a relatively young sub-discipline. Although people have always been fascinated with what lies beneath the surface, opportunities for more detailed and systematic exploration of the underwater did not exist prior to the mid-20th century, partly due to cumbersome diving equipment. The revolutionary development and commercialisation of scuba diving technology in the 1940s and the 1950s resulted in increased activities at and around archaeological sites underwater. The growing number of hobbyists meant that large quantities of archaeological finds surfaced, which necessitated the development of a new field of experts in matters of underwater archaeology.

In other words, maritime archaeology did not develop because terrestrial archaeologists wanted to include underwater sites in their research (Maarleveld 2007). Whereas terrestrial archaeology developed as a reaction to intensifying land-use

and the newly found motivation for the construction of national identities, maritime archaeology developed as a direct reaction to the activities by non-professionals around underwater remains. When academic assistance was needed in dealing with these remains, and when nonesuch existed, maritime archaeology was born (see also Flatman 2007a; 2007b; and Bass 2011 for the origins and development of maritime archaeology, and Delgado 2000; Barstad 2002; and Broadwater 2002 for explicitly methodological historiographies).

Although maritime archaeology of the early decades – when archaeologists were rarely divers – is often characterised as little more than unsystematic treasure hunting, it is also a period of intensive disciplinary development. Gately and Benjamin (2018, 16) identify the 1960s as a decisive point in time for the formation of maritime archaeology into an academic discipline and they list such works as Goggin (1960), Frost (1963), Du Plat Taylor (1965), Throckmorton (1965), and Bass (1966) as significant works in this development. However, the discipline's development towards theoretical awareness culminated in the publication of Keith Muckelroy's (1978) *Maritime Archaeology*. Muckelroy's great insight was that maritime archaeology was not essentially about the underwater, but about the people and their activities on the sea: "maritime archaeology is concerned with all aspects of maritime culture; not just technical matters, but also social, economic, political, religious, and a host of other aspects" (Muckelroy 1978, 4).

If previous research had emphasised the underwater element of maritime archaeology, Muckelroy included in maritime archaeology also sites on land. In this sense, Muckelroy's view of maritime archaeology is aimed at its integration with maritime

anthropology, maritime history, maritime sociology, and maritime ethnology (Hasslöf 1972; Henningsen 1972), but most importantly, with prehistoric archaeology. Muckelroy studied in Cambridge under prehistoric archaeologist David Clarke and, in many ways, *Maritime Archaeology* is the maritime equivalent of Clarke's (1968) *Analytical Archaeology*, one of the important theoretical landmarks of the New Archaeology (Adams 2009; Harpster 2009). In fact, it is common to cite Clarke in reference to the relatively late 'loss of innocence' of maritime archaeology (Stewart 2011).

Further development of the kind of integrated approach initiated by Muckelroy, and later called for by many others, took place in the 1980s and the 1990s (Cummings 1979; Cederlund 1995; Weski 1996). Gould (1983), for instance, called for greater attention to research design and through that for a greater understanding of man's relationship to the maritime environment. Gawronski (1992), on the other hand, expanded on Muckelroy's humanistic approach, treating the ship as a social element. Others suggested the theoretical treatment of ship as a general ideological symbol in their social maritime archaeology (Crumlin-Pedersen & Thye 1995; Ballard et al. 2003). Of all the integrated approaches, however, the most influential was Christer Westerdahl's maritime cultural landscape, a concept which he introduced as a tool for heritage management already in the late 1970s, but which reached wider audiences only after the early 1990s (Westerdahl 1992; 2005; 2011. See also Hunter 1994; Cederlund 1995; Parker 1995; 1999; Bannerman & Jones 1999; Ford 2011).

Westerdahl (1992) treated maritime cultural landscape as an umbrella term and conceptual context for the full consideration

of the social extent of the questions of maritime archaeology – a way to combine the technical and/or descriptive study of the remnants of maritime cultures underwater and their relationships with the manifestations of maritime culture on land. Maritime cultural landscape was therefore a holistic approach that aimed to combine the immaterial or cognitive aspects of what it means to be maritime with the material archaeological remains of maritime communities (Westerdahl 1992, 5; 2011). Westerdahl divided the landscape into zones characterised by hotspots of different maritime activities. As such, his work shares some similarity with other landscape approaches popularised in land archaeology around the same time. Tim Ingold's (1993) concept of taskscape and Christopher Tilley's (1994) phenomenological take on the landscape both highlight the landscape as a context that does not only dictate activities in the functionalist sense, but as a phenomenological constituent of human cognition and experience.

As much as Muckelroy's and Westerdahl's anthropology and maritime ethnology informed integrated approaches represented a return to humanism, the spread of their ideas into mainstream maritime archaeology did not happen properly until the 2000s. Jon Adams (2006) recounts in his editorial to the first issue of *Journal of Maritime Archaeology* that something happened at the turn of the millennium that made maritime archaeology widely interesting to other archaeologists, which in turn made it possible to establish a journal dedicated to more theoretically oriented expositions of maritime archaeology. The integrated approach initiated by Muckelroy and Westerdahl was the motivation behind the establishment of the journal, but the increase in interest in the different theoretical aspects of maritime

archaeology is reflected in the variety of approaches adopted by scholars in the 2000s.

Recent theoretical approaches are characterised by their increasing focus on both past and present social aspects of maritime archaeology. As argued by Joe Flatman (2003), for maritime archaeology to be more theoretical means including in the analysis questions of shipboard identities, gender, race, class, adopting a phenomenological understanding of seascapes, and seeing objects through their individual biographies. Indeed, takes on social maritime archaeology along these lines have appeared in the course of the 21st century. Drawing from a host of different social theories and philosophies, mainly actor-network theory, Dolwick (2009) provides a definition of the social in maritime archaeology and argues that boats and people, for example, are best understood as mutually constitutive networks or assemblages of actors (Dromgoole 1999; Adams 2001; Gibbins & Adams 2001; Tuddenham 2010; 2012).

Following Flatman's (2003) call for an engendering of maritime archaeology, Jesse Ransley (2005) provides an explicitly queer theoretical account of the history and present state of maritime archaeology. Ransley argues that, beginning with the seafarer as a masculine figure, followed by the image of the maritime archaeologist and his methodology, maritime archaeology is saturated with masculist iconography. Ransley contends that diving into wrecks is a form of masculine adventure and that the methodologies of maritime archaeology, which are often highly technological and facts-oriented, produce empiricist and functionalist interpretations, likewise characterised by Ransley as masculist. Ransley points out that the aforementioned epistemological and methodological ideals contribute to what the



dominant narrative displays as “proper archaeology”. She then argues that “by failing to explore, or even challenge, the masculinist character of maritime archaeology, maritime archaeologists are in fact contributing to their own marginalization within the discipline of archaeology” (Ransley 2005, 622). As a solution, Ransley proposes that by integrating maritime archaeology to the wider sphere of interpretive archaeology some of its masculinist biases, and marginalisation, could be overcome and prevented.

Despite the attempts to queer maritime archaeology and open it up for alternative archaeologies, many still think that the discipline remains heavily wreck- and methodology-oriented. Gately and Benjamin (2018) contend that, despite the advances in maritime archaeology since the sixties, the discipline is still portrayed in popular culture as little more than treasure hunting and wreck diving. Coupled with the increasing development of digital technologies and big data in the humanities, and regardless of the integration of maritime archaeology with archaeology and other disciplines, the field remains divided into two camps, one heavily theoretical and the other increasingly practical (Firth 1995; Flatman 2003; Parham & Palma 2008; Stewart 2011).

This has obvious implications in the planning of teaching of maritime archaeology, as it is usual for degree programs to concentrate on providing students with good command in critical theory and other academic skills such as writing, or emphasise in teaching those practical skills that will most likely guarantee employment outside academia. Many programs claim to balance between these two realms, but in practice curriculums often emphasise one over the other. We will return to this topic in Chapter 3.

## **Underwater cultural heritage, commercial organisations, and avocational communities**

Though much of the impetus of maritime archaeology's development into a full-fledged sub-discipline of archaeology has to do with the need for the protection of underwater sites as cultural heritage, UNESCO's 2001 *Convention on the Protection of the Underwater Cultural Heritage* provided a global framework for their protection. The convention's implications are significant for member states (those countries that have ratified the convention) without existing state-level legislation for the protection of underwater cultural heritage (UCH) or related education systems. The convention provides grounds for the definition of UCH, its protection, research and use, as well as teaching of maritime archaeologists and heritage professionals. However, the convention has also been subject of much discussion about the problematics involved, beginning with the modernist Eurocentrism of UNESCO (O'Keefe 1996; Forrest 2002; Meskell 2018). Therefore, in addition to the aspects related to the protection of UCH, ratification can have significant political and economic implications. Japan, for example, has not ratified the convention, but if they do, it will mean the establishment of a dedicated research institute with state funding. In this sense, the effects of ratification are comparable to a heritage site's inclusion in the UNESCO World Heritage List. Inclusion in the list has significant economic implications.

As of May 2010, 31 countries had ratified the convention (Staniforth 2010), and as of May 2020, there are 63 states parties. As many other countries with strong jurisdiction for

the protection of cultural heritage, Finland has not ratified the convention. Nevertheless, as more states ratify, the heritage aspects of maritime archaeology become subject of international discussion. This means that a degree program in maritime archaeology will benefit from the incorporation of teaching with heritage studies. It is likely that the role of heritage politics as part of the tasks of a maritime archaeologist will only increase in the future, both in the heritage management sector and within academia. These are all aspects that have to be taken into consideration also in the planning of teaching and training of maritime archaeologists (Ransley 2007; Pydyn & Flatman 2008; Radic Rossi et al. 2008; Staniforth 2008b; 2009; 2010; Gribble 2011; Rey da Silva & Herrera 2017; Underwood & Manders 2019; Willems et al. 2019).

The heritage aspects brought forward above are directly related to infrastructural maritime archaeology and the commercial organisations involved in heritage management. Heritage legislation differs by country, and the lack of centralised management or insufficient capacities of state driven heritage management have given rise to privately owned companies in the field. These companies often organise surveys or excavations commissioned by development planners according to the demands of the heritage legislation of the state in question. The companies are also actively involved in the popularisation of maritime archaeology and the dissemination of knowledge to the wider public. Commercial companies often specialise in the documentation of underwater sites and the use of 3D imaging technologies.

Academic archaeology, heritage management, and private companies are all involved in the popularisation of maritime

archaeology but also other forms of collaboration with avocational communities. In archaeology, this aspect is often referred to as community archaeology (Marshall 2002; Cohn & Dennis 2011; Rockman & Flatman 2012). There exists a large base of hobby divers and hobby diving associations that promote safe and responsible diving at heritage sites and the needs of these communities have to be taken into consideration in planning of formal teaching (Satchell 2008). The possible effects of the commercialisation of heritage management in higher education will be explored in further detail in Chapter 3. The role of heritage management, private companies, and hobbyists in the context of Finnish maritime archaeology and planning of teaching will be discussed in Chapter 4.

In conclusion, it is possible to identify four sectors that make up and contribute to the field of maritime archaeology and which (and the histories of which) have to be considered when planning teaching in maritime archaeology at the University of Helsinki:

- 1) Academic institutions
- 2) National and international heritage management sector
- 3) Commercial organisations
- 4) Avocational communities

Collaboration between these four sectors undoubtedly introduce distinctive challenges but also opportunities. In this report, the connections are analysed mainly from the perspective of academia and curriculum development.

# 3

## Pedagogical considerations for maritime archaeology

---

### **Curriculum development and commodification of university teaching**

Curriculum development is a specific subfield within pedagogy and includes topics such as critical curriculum development (Carnell 2007; Peach 2010; O'Neill 2015), curriculum development in relation to particular philosophies and views of knowledge production (Scott 2014; Hoadley et al. 2019), and curriculum development in relation to the evaluation of the quality of education (Biesta 2010). Evaluation and benchmarking of education has been introduced into academia from corporate business and is a topic of much discussion. It is becoming increasingly hard to justify teaching that cannot demonstrate immediate practical applicability in a commercial world.

One significant question that curriculum development then faces is the impact of economics on the contents of teaching in higher education. The economic concerns have been particularly pressing in archaeology after the 2008 financial crisis which led to significant drop in development of housing

and infrastructure. Countries that have adopted a commercial system of archaeological heritage management were seriously affected by the crisis. In the UK, for instance, one in six jobs in commercial archaeology were lost (Aitchison 2009, 662). The estimated number of people working in archaeology in the UK is 6800, while 40–50 000 people work in archaeology worldwide (Flatman 2011; Aitchison 2013).

Although state service driven economies like Finland seem to have been less affected by the economic crisis, the effects, and therefore recovery, are only delayed. The effects may be felt in state services and budgets long after recovery has begun in market driven commercial sectors (see also Aitchison 2004; Hamilakis 2004; 2015; Schlanger & Aitchison 2010). At the same time, however, the number of people looking to study archaeology is increasing. In the UK, the total number of university applicants in archaeology increased 9,7 % between 2008/2009 and 2009/2010 (Aitchison 2009, 662).

What the effects of the 2008 economic crisis highlight is that university teaching is becoming increasingly commodified (see also Rainbird & Hamilakis 2001; Parker 2002; 2003; Aitchison 2004; Hamilakis 2004). This poses a problem for curriculum design. On the one hand, teaching has to be able to predict the needs of the commercially driven practice sector and provide skills that are useful in infrastructural archaeology. On the other hand, higher education is also committed to the cultivation of critical thinking and the type of knowledge that is hard to evaluate in terms of immediate practical usefulness. This means that universities have to balance the contents of their teaching between academic and practical skills.

As pertains to teaching of practical skills, it is often reported that heritage agencies and consultancy companies frequently complain that graduates who enter the job market lack practical skills and workplace experience (Aitchison 2004; Colley 2004; Hamilakis 2004). It is therefore ironic that teaching of academic skills in large classes is less affected by budget cuts caused by development-related financial oscillations than teaching of practical skills, which can be very expensive and is often only possible with a small group of students (Colley 2004).

The insecurities involved in curriculum design in the face of the commodification of university teaching has necessitated a monitoring of student satisfaction, on the one hand, and satisfaction of employers with how skilled graduates are when they enter the job market, on the other. Statistical surveys of student satisfaction are carried out Europe-wide by institutions such as Eurostudent and nationally by organisations like Statistics Finland, [töissä.fi](https://www.stat.fi), and VIRTA-opintotietopalvelu. Statistics Norway, for instance, reports that, of all the Nordic countries, Finnish students are most satisfied with the quality of teaching (Statistics Norway 2018). However, the situation is not as good among archaeology graduates. According to the University of Helsinki Faculty of Arts career monitoring report for 2003–2013 (University of Helsinki 2019), archaeology graduates are generally unsatisfied with how their studies prepared them for the requirements of their current job.

Similarly, the satisfaction of employers has been a subject of evaluation (NAS 2009; Quality Assurance Agency 2014; Harris & McKinnon 2015). Aitchison and Edwards (2003) report that university teaching in the UK matches poorly the requirements of the profession: 67 % of archaeological employers felt that current

university teaching matches the needs of the practice sector poorly or very poorly, and only 1 % thought that teaching matches the needs very well. Such responses from employers further strengthen the perception that archaeology, at least in certain parts of the world, is becoming increasingly commodified. As argued by Aitchison (2004, 204), professionals outside academia perceive themselves as consumers of a “commodity that is trained archaeologists”.

Despite the consumerist attitude of the practice sector, or perhaps for that reason, the readiness of the job market to contribute to the training of archaeologists has been poor. Aitchison (2004, 216) contends that, in the commodification of academic teaching, both academia and the practice sector must assume responsibility in providing employees with the needed professional skills. “Employers must realize that they have an obligation to train their staff, whether at entry level or by maintaining and enhancing their organizational skill base through continuing professional development” (see also Colley 2004; Geary 2013).

The problem is even more pressing when very specialised skills are expected from university graduates. Geary (2013), for instance, argues that it is unrealistic to expect that higher education should provide archaeologists with all the skills needed in the job market, and that specialist training should be provided by the industry and the commercial sector.

The solution, then, is to coordinate more closely what it is that an academic curriculum includes and what it is that the job market expects (Staniforth 2008b). There is a lot of teaching that may be impossible to include in teaching either because of the lack of expertise or because teaching of diving,



for example, would simply be too expensive to include in an academic curriculum (see also Manders & Underwood 2015; Underwood & Manders 2019).

On a related note, the commodification of university teaching has to be accounted for not simply by increasing teaching of practical skills, but by rethinking how academic skills and critical thinking are taught and what their connection and relevance is with teaching of practical skills. Yannis Hamilakis (2004) suggests that the challenging of instrumentalist pedagogy can be done by 1) creating space for critical reflection, 2) by reconnecting subjectivity and experience with knowledge, and 3) by allowing students to understand, question, and transform the material and social processes that generate and reproduce their own subjectivity.

Hamilakis' suggestion is based on the observation that the argument that archaeology should become more relevant and link up to the real world is usually driven by the idea that the real world is the world of business and that relevance is a matter of profit maximisation and economic efficiency. This ideal is most pronounced in cultural resource management (CRM) where archaeology is asked to link up with the real world. This, Hamilakis (2004, 292) argues, is a troubled view: "In most Western countries, however, the CRM sector is a huge business that operates under the principle of the most aggressive competitive capitalism, where maximization of profit and minimization of cost (including the cost of training its employees) is the ultimate aim." Relevance, then, is a much wider matter than the business model suggests.

“Archaeology’s main teaching aim could be to show that things *could have been otherwise*, that the present conditions are historically contingent and explainable. It can show how certain power relations, inequalities and asymmetries have been *objectified*, have been inscribed into the landscape and on the material world, so as to appear natural and eternal. It can also show how, often, these objectified material relationships have proven vulnerable, unstable, ephemeral.” (Hamilakis 2004, 296, original emphases)

In other words, Hamilakis aims to show that, in commodification, subjective political and commercial values have become objectified through a rhetoric that assumes the world of business to be more real than that of higher education. Hamilakis’ suggested solution is to intensify the teaching of critical skills, but in a way that reveals the subjectivities involved in research. For instance, Hamilakis offers the student-centred journal as one way for the students to critically assess their own place and role as active knowledge producers rather than simply as consumers of knowledge. By reducing the gap between teaching and research the students can realise that they too can become researchers, and that research as acquiring of knowledge does not mean bracketing of personal experiences and subjectivity (see also Davis 2000).

What Hamilakis’ treatment again highlights is that archaeology remains inherently split into two camps, one theoretical and one practical. As we saw in Chapter 2, this is also characteristic of the history of maritime archaeology, and pedagogical considerations in maritime archaeology, too, often revolve around this topic.

## **Balancing between theory and practice in teaching of maritime archaeology**

Jesse Ransley (2008) writes in her introduction to a special issue of *Journal of Maritime Archaeology* on education and training in maritime archaeology that

“there is not yet a mature pedagogical debate within the discipline and that much of the current discussion reveals an instrumentalist discourse, one concerned with an increasing, and sometimes divisive, focus on the acquisition of technical skills and the pragmatics of developing and sustaining maritime archaeology courses in the contemporary educational environment. Yet, it seems the time is ripe for us to look more closely at what we teach, how and why.” (Ransley 2008, 53)

Some of the questions asked in that special issue include finding a balance between teaching academic and practical skills, the concerns of avocational training, public engagement, engagement with schools and educational outreach, and gaps in teaching. The papers then cover a variety of topics related to education and curriculum development in maritime archaeology from different perspectives, but they share one particular worry. In all of the articles, including those that argue for an explicitly practical or skill-based approach to teaching maritime archaeology (e.g. Parham & Palma 2008), the need for theoretical reflection and critical skills is expressed.

This reflects the widespread worry that teaching of maritime archaeology has not been able to engage in matters of archaeological theory (Ransley 2008; Markoulaki 2009; Stewart 2011). These worries are often expressed by recourse to the privatisation of teaching and the pressures set by the market forces, the real-world challenges of development and construction, or the demands set by real-world problematics involved in the protection of UCH. The real reason for these worries, however, seems to be the fact that the imagined need to react to the need of protection of UCH or the technical requirements of surveying in development-led research undermines the discipline's theoretical or methodological development (Adams 2007).

Within academia, balancing between teaching of practical skills and theoretical knowledge is directly related to the question of maritime archaeology's integration with other disciplines. As we saw in Chapter 2, the idea that maritime archaeology should be inherently integrated into archaeology was the leading motivation for Muckelroy (1978). Similar values and aims characterise the discussion on training and teaching maritime archaeologists from the 1970s until today. For instance, in his article *Training maritime archaeologists* Seán McGrail (1995; see also McGrail 1997) provides an outline for the contents of a degree in maritime archaeology. The aim of a degree for McGrail should be balance between "intellectual quality and practical achievement" (McGrail 1995, 331). This means that, upon graduation, students should be able to assess critically the role and aims of the discipline in the broader academic sphere (in relation to archaeology and other sciences), the society, politics, as well as economics.

McGrail defines maritime archaeology as

“the study of Man’s encounter or interaction with the waters of the world – oceans, seas, rivers and lakes. This research area includes the study of landing places and harbours as well as the study of the building, operation and performance of rafts, boats and ships. It also includes the study of anchors and fishing gear; overseas colonisation and trade routes; changes in past climates, in sea levels and in coastlines; and early seamanship and navigational techniques. As this is an archaeological subject it is necessarily focused on material remains, nevertheless, it blends with the study of maritime history and also with maritime ethnography.” (McGrail 1995, 329–330)

In other words, maritime archaeology has a worldwide perspective and it is interdisciplinary (McGrail 1995, 331). For McGrail, from this follows that maritime archaeology needs a firm grounding in archaeology.

In his suggested structure for a degree in maritime archaeology, McGrail (1995, 331–332) then writes that students should start with a bachelor’s degree, which includes archaeological theory, methods and techniques. In the final year of this degree, it may be possible to take aspects of maritime archaeology as a special subject. However, it will be in a master’s degree that maritime archaeologists will get their specialist training. A master’s degree should consist of two main elements: taught courses involving a range of disciplines; and practical experience of boatbuilding and seafaring and work on inter-tidal and underwater sites. McGrail (1995, 331–332) contends that when students advance to their

master's studies, "[m]uch of the general archaeological knowledge and expertise gained on a first degree course will continue to be of use, especially source criticism, dating techniques, research methods, quantitative methods, excavation techniques, and the history of cultures and civilisations", but more technical aspects such as environmental studies, materials studies, tools and techniques of boat building, settlement and trade, and maritime conservation should be emphasised in a master's degree.

McGrail's outline of teaching of maritime archaeology portrays the discipline as part of archaeology, but with an identity of its own. In this sense, maritime archaeology, as a set of specific methodologies and research questions, is an independent discipline that nevertheless will contribute to or benefit the teaching of terrestrial archaeology. More recent takes on the pedagogical problematics of maritime archaeology follow the same idea of integration with archaeology with emphasis on the importance of retaining a maritime identity (Gale 1993; Cederlund 1995; Richards 2006; Flatman 2007a; 2008; Adams 2008; Firth 2008; Staniforth 2008a; 2008b; 2009).

One widely adopted argument for emphasising teaching of theoretical reflection in addition to practical skills is that universities should concentrate on the task of teaching people how to learn and develop their skills through critical reflection (Dellino-Musgrave 2008; Firth 2008; Markoulaki 2009). Maritime archaeologists continue to develop throughout their career and therefore need analytical skills not only to develop their own field in terms of responding to the needs of academia but also in terms of being able to respond to the changing needs of the market sector.

As Ransley (2008, 56) points out, “[t]echnical skills might be taught on the job but judgement and archaeological resourcefulness cannot”. Similarly, maritime archaeologists, like all archaeologists, have to be able to respond to the idea that knowledges are situated and therefore consider the multiple interpretations of the past. In this sense, the model in which education and training is seen firstly as transfer of objective technical skills is not tenable, and instead the maritime archaeologist should be equipped not only with technical skills but with skills to negotiate those multiple or alternative conceptions of the past (Ransley 2007). “There is, therefore, a need to both teach and support ‘critical reflection’ on the material and social processes of producing knowledge and on the historical and political specificity of our pedagogy: to recognise it as a dynamic field of cultural production” (Ransley 2008, 57).

In general, the topics brought up in the articles of the special issue of the *Journal of Maritime Archaeology* (Ransley 2008) on matters related to the development of teaching in maritime archaeology highlight that a healthy combination is needed between developing students’ competence in conducting methodologically advanced fieldwork independently, collaboration with governments, museums, and commercial organisations, and teaching of a critical disposition towards the evaluation of their own theoretical and methodological positions. In short, teaching should equip the student with knowledge on how maritime archaeology is practiced and why it is important but also with the ability to assess the discipline’s goals and values ethically (Flatman 2007a; 2007b). As argued by Sturt,

“it is impossible to generalise about what we should teach, as it does vary from student to student and intake to intake. What we can insist upon is a series of standards and academic expectations; that everyone involved understands the process of archaeology (practical and theoretical) and that all are able to question and further it.” (Sturt 2008, 83)

When evaluating the pros and cons of teaching concentration, an interesting case in point is the Centre for Maritime Archaeology & Underwater Cultural Heritage at Alexandria University. Emad Khalil (2008) provides an extensive report of how the centre and its curriculum came to be. In the 1990s, two underwater excavations took place in Egypt that initiated the history of maritime archaeology in the country. Khalil then divides the history of maritime archaeology in Egypt into two phases: pre- and post-mid-90s. Before the mid-90s, maritime archaeology was mostly led by non-specialists and accidental discoveries at Alexandria region. The second phase is mainly led by European and American archaeologists (universities and institutions).

Education has not been able to grow together with the amount of research being done and therefore Egypt has relied totally on work by foreign archaeologists (Khalil 2008, 86). The Department for Underwater Archaeology, established in 1996 as part of the Egyptian Supreme Council of Antiquities, has concentrated on monitoring and organising foreign projects rather than developing teaching. Khalil then explains that

“two main factors contributed to the postponement of creating a specialised education programme in maritime



archaeology in Egypt. The first was the lack of local expertise required for designing, formulating and running such a programme, and the second was the lack of funding needed to provide the necessary facilities and equipment.” (Khalil 2008, 87)

In 2007, however, an EU grant of 250 000 € was awarded for the creation of an educational centre for maritime archaeology at the Alexandria University. This attracted additional money and expertise, and the Centre for Maritime Archaeology & Underwater Cultural Heritage was born.

Khalil (2008, 89–90) also reports the process of formulating the syllabi and the contents of the courses taught. For that purpose, maritime archaeology programmes offered in a number of universities around the world were evaluated. The evaluation revealed that there is great diversity in the contents of the courses they offer. According to Khalil, programmes are either economically driven in which case they aim to fulfil the practical and technical needs of the commercial archaeology sector, or more academically and theoretically oriented programmes. An equally decisive factor was the geographical location of the institute. Institutes tend to be interested in topics that deal with their surroundings, although global projects can broaden this specialisation. Finally, the available staff and their field of expertise greatly affects what is taught.

Khalil identifies pros and cons in the variation between institutions and courses. The obvious advantages include the ability to meet the different interests and requirements of the students, the response to different local and regional research interests. Another advantage of variation is that it provides an

opportunity for collaboration between institutes across a broad range of issues related to education and training. Students and staff members will then benefit from this diversity.

There are however also disadvantages to the diversity. Khalil contends that the fact that certain geographical areas or time periods are disregarded in the course contents at some institutions results in obvious gaps in their teaching. Another disadvantage concerns the emphasis on practical teaching. Those institutions that focus on teaching practical matters often tend to overlook courses that provide the theoretical and historical context of maritime archaeology. One particular downside that could possibly result from the lack of theoretical engagement concerns the multidisciplinary nature of maritime archaeology. If students are unable to assess the discipline on a historical and theoretical level critically, they might also be unable to understand the wider multidisciplinary nature of maritime archaeology (Khalil 2008, 90).

In conclusion, Khalil suggests that if there is one course that should be included in all programmes in maritime archaeology, it should be related to the management, preservation, and presentation of cultural heritage. This cultural heritage approach, Khalil concludes, is what gives maritime archaeology its global effect, and, despite the many differences between institutions around the world, the preservation of maritime and UCH could become the common language between maritime archaeologists around the world (Khalil 2008, 91). Egypt ratified the 2001 UNESCO Convention in 2017.

Returning to the topic of student satisfaction in finding a balance between teaching of theory and practice, the maritime archaeology program at University of Southampton is a case

in point. Sturt (2008) provides a survey of 48 past and present Southampton master level students, which revealed that concentrating on what should be taught (the specifics) misses what students actually get out of the teaching and therefore how the community benefits from teaching. Based on the responses, while they also reveal that there is room for instrumentalist conceptualisation of education (education has to be relevant outside academia), a balance should be set between practical skills and critical reflection. Graduates should be prepared to not only think about issues that are relevant for the field but also to do something about them in the future. Therefore, the practical skill teaching should similarly focus on teaching students the ability to develop their skills and research methodologies.

Perhaps not relevant in Finland, but Sturt (2008, 81) takes up a response according to which teaching in undergraduate level in the UK is often focused on developing research skills rather than practical skills. Therefore, students who want to further their practical skills seek MA level teaching. However, MA studies should focus on providing research skills, but because practical skills are often not taught at BA level, MA programs have had to take the place of undergraduate professional education. In general, Sturt's questionnaire shows that students in Southampton see high level teaching in theoretical and critical issues as a prerequisite for acquiring and developing practical skills.

Ultimately, teaching of maritime archaeology depends on a host of economic factors related to student intake and the capacity of the job market, as well as personal aspect related to the expertise of and values held by existing staff. Nevertheless, as Firth (2008, 126) contends, "there is no formula for education

in maritime archaeology. Of all my colleagues, no two have been alike. I hope it stays that way.” It is then perhaps good to keep in mind that setting up role models or subscribing dogmatically to intellectual traditions is not the correct way to teach, but more important is to follow one’s intuitions and emotions (Leone 2013).

# 4

## Maritime archaeology in Finland

---

### **Maritime archaeology and the establishment of underwater cultural heritage management in Finland**

The development of maritime archaeology in Finland is intimately tied to the history of the Finnish Heritage Agency (for a history of maritime archaeology in Finland, see also Marila & Ilves, under review). In one sense, this history starts in the early 1960s when increasing opportunities for sports diving during the 1950s and the salvage of the *Vasa* in Sweden in 1961 led to huge public interest in underwater heritage. Activities around the growing number of discovered underwater sites, mainly shipwrecks, and the increasing amount of material lifted from them by hobbyists slowly led to the establishment of a national maritime museum. In 1962 and later in 1964, the Ministry of Education appointed a special maritime museum committee to prepare the establishment of a national maritime museum. The committee statements (Merimuseotoimikunta 1963; 1965), while ambitious, never led to the establishment of a dedicated maritime museum.

In 1968, as a result of the growing number of sports divers and increasing pressure around known underwater sites, the Archaeological Commission (the predecessor of what is now Finnish Heritage Agency) founded the Maritime Archaeological Commission (*Meriarkeologinen toimisto*) whose responsibility was to undertake maritime archaeological and maritime historical research (Muinaistieteellinen toimikunta 1968). In addition, the Finnish Antiquities Act (295/1963) had been put into effect in 1963, and with it wrecks over 100 years old and any loose finds associated with them had been brought under legislative protection.

The Maritime Archaeological Commission was supposed to be a temporary organisation, but in 1972 it was made a permanent part of the Finnish Heritage Agency (and its name changed to Maritime Historical Commission). In the fall of 1973, the Maritime Historical Commission was located in Hylkysaari, and in 1981 the Maritime Museum was opened there. However, in 2003 the Ministry of Education decided to move the Maritime Museum from Helsinki to Kotka (where it opened in 2008). With these changes, the Maritime Historical Commission was closed and the newly established Maritime Archaeology Unit (*Meriarkeologian yksikkö*) was placed organisationally under the Finnish Heritage Agency's Archaeology Unit (*Arkeologian yksikkö*).

In terms of heritage management, the “golden days” of Finnish maritime archaeology were between 2004 and 2011, following the establishment of the Maritime Archaeology Unit. The unit, working under the Archaeology Unit, had a staff of approximately ten people and was in charge of its own budget. This made it possible to effectively combine heritage

management tasks with research. In practice, one person was in charge of management tasks, while the rest of the staff could use their time to research the known sites.

In 2011, as part of yet another organisational restructuring at the Finnish Heritage Agency, the Maritime Archaeology Unit was closed and all tasks related to the protection of underwater cultural heritage were directed to the newly formed Cultural Environment Services. This meant that maritime archaeology was no longer in charge of its own budget. Instead, it now had to compete for funding with archaeology and the restoration and protection of the built environment. This has also led to a situation where large maritime archaeological research projects are increasingly hard to justify and all larger projects have to be planned with external funding. On the other hand, this change brings experts in many different fields under one roof, which leads to increased opportunities for organising multidisciplinary research.

The Antiquities Act remains in effect and requires protection of all underwater sites of ancient origin and wrecks of 100 years of age and older. Today, the Finnish Heritage Agency is the sole organisation in Finland in charge of the protection and management of maritime and underwater cultural heritage, and works in connection with national and international actors (Museovirasto 2019). Other institutions worthy of mention are local museums which, with the new museum law (314/2019), have more regional responsibility in the management of cultural heritage, and which should therefore be included in the development of teaching in maritime archaeology, too.

## **Development of higher education in maritime archaeology in Finland**

Complete degree programs in archaeology are offered in three universities in Finland: at the University of Oulu in northern Finland, at the University of Turku in western Finland, and at the University of Helsinki in southern Finland. All three universities offer BA, MA, and PhD degrees with specialisation in archaeology. In terms of research emphasis, the University of Helsinki has traditionally specialised in Stone Age and Bronze Age research, whereas research in Turku and Oulu have emphasised medieval and historical archaeology.

Completing a specialised degree in maritime archaeology has never been an option in any of the three universities. However, between 2011 and 2013 the University of Turku offered basic and subject level modules in maritime archaeology as part of its degree in archaeology. Teaching of maritime archaeology in Turku ended in 2012 with the announcement of the tenure track professorship in maritime archaeology at the University of Helsinki. At the University of Helsinki, an interdisciplinary module in maritime history was offered between 1993–2020. Teaching within the module was gradually brought down since 2012, and it was possible to complete the module with book exams until the end of 2020.

### **University of Turku**

The development of teaching of maritime archaeology at the University of Turku was closely connected to a field course organised in collaboration between University of Turku and



Hanko Summer University since 1997. This field course, which is still organised every year, is targeted to maritime archaeologists and sports divers alike. Currently, the course is the only platform for training in maritime archaeology field methods in Finland and, due to its focus in field practices, the course has always been very popular. However, diving skills were never required to complete the studies in maritime archaeology in Turku.

Due to changes in legislation in higher education, since 2010 it has been impossible for summer and open universities in Finland to offer teaching that was not part of the connected university's curriculum. In order for the course in Hanko to continue, complete basic and subject level studies in maritime archaeology were set up at the University of Turku. A curriculum comprising 60 ECTS points in maritime archaeology was offered between fall 2011 and spring 2013. In practice, during the first two years, only basic studies were offered with the intent to attract enough students to enrol for the subject level. The offered courses, strongly underwater-oriented in character, were very popular with 30–40 students enrolling for the first-year courses, and about 15 completing all available courses.

When the tenure track professorship in maritime archaeology was announced at the University of Helsinki in 2012, teaching in Turku was thought redundant, and the last courses were offered in 2013. Collaboration with Hanko Summer University continues, and it is possible to include the Hanko field course as part of one's studies in archaeology at the University of Turku.

## University of Helsinki

In the early 1970s The Maritime Historical Commission was the organisation under Finnish Heritage Agency whose responsibility it was to put the 1963 Antiquities Act into action, but lack of diving archaeologists made carrying out those tasks difficult. Most of the information that had been gathered from underwater sites was produced by hobbyists and diving associations, with the help of diving association Teredo Navalis in particular, rather than researchers. As in many other parts of the world, the lack of training for diving researchers was the original motivation for setting up teaching at the University of Helsinki in the early 1990s.

The development of maritime archaeological training at the University of Helsinki is chiefly attributable to Leena Sammallahti. Upon entering the Maritime Museum as its director in 1988, Sammallahti started to explore the possibilities for establishing a multidisciplinary module at the University of Helsinki and set up a meeting with professors Juhani U.E. Lehtonen (ethnology), Yrjö Kaukiainen (economic history and maritime history), Matti Klinge (history), and Ari Siiriäinen (archaeology). It was decided in the meeting that, within each discipline, lectures on maritime topics would be included in existing teaching, and that those lectures would later be combined into a complete module called maritime history (pers. comm. L. Sammallahti, April 16, 2020).

A module in maritime history was then established in 1993. The module was 25 ECTS points in total. It consisted of a combined introductory course (8 ECTS points) in maritime history, maritime ethnology, and maritime archaeology where

students got an overview of all three fields; a practicum course (8 ECTS points) in either maritime history, maritime ethnology, or maritime archaeology where students got to learn research skills in the archive or by doing archaeological fieldwork; and three optional (3 ECTS points each) book exams in maritime history, maritime ethnology, and/or maritime archaeology. The three exams in maritime archaeology focused on research methodology, research materials and sites, and theory of maritime archaeology (see also Tevali 2012). Of these three segments, the theory of maritime archaeology was very strongly emphasised and included advanced level literature on archaeological theory. During its existence, the module, which was open to all students, was very popular with 40–50 students participating in the introductory course in the best years. Of the 40 who started on the introductory course, five students in average continued onto more advanced and specialised courses in maritime archaeology.

The maritime history module was designed to be multidisciplinary from the start and the development of teaching in maritime archaeology was intimately tied to pre-existing teaching in maritime ethnology and maritime history. Maritime historian Yrjö Kaukiainen was central to the development of the module, and Leena Sammallahhti's background in ethnology further contributed to the interdisciplinary nature of the module. Also, collaboration with biology was developed, and joined courses with the department of hydrobiology were organised as part of the module. The maritime archaeology component of the module was organised partly with external teaching by Swedish experts, for example, Christer Westerdahl, but more important were the Finnish module alumni. Many of those who taught in the module had completed it in its early years, and

most of those working with maritime archaeology in Finland today completed this module in maritime history.

Teaching in the maritime history module at the University of Helsinki was gradually brought down for three reasons. Firstly, teaching within the module was organised in 2011 and 2012, i.e. in its final years, with an annual financial support of 10 000 € from Nord Stream, the company responsible for the construction of a natural gas pipeline in the Baltic Sea between Russia and Europe. As part of the construction, Nord Stream conducted extensive surveys of the natural and cultural environment in the Baltic Sea, and it was in the best interest of Nord Stream to develop collaboration with maritime archaeologists in Finland. The sponsorship from Nord Stream ended in 2012 with the completion of Nord Stream Line 1.

Secondly, the tenure track professorship in maritime archaeology at the University of Helsinki was announced in 2012 and teaching responsibilities were gradually transferred from the maritime history module to Marcus Hjulhammar. Hjulhammar was assistant professor in maritime archaeology, active in 2014–2015, but in that period, courses or lectures in maritime archaeology were sporadic.

Thirdly, with organisational restructuring within the University of Helsinki Faculty of Arts, maritime history has not been part of the new Department of Cultures' teaching plan since 2017. However, it was possible to finish the module in maritime history with book exams. Students who may have completed parts of the module had the possibility to graduate according to the old degree requirements until December 18, 2020 and include the module in their degree.

## **Current research and fields of expertise in Finnish maritime archaeology**

The majority of people working in maritime archaeology (academic research, heritage management, or privately-operated companies mainly involved in infrastructural archaeology and development on documentation methods) in Finland today received their training in Finland. For this research, interviews were carried out with 12 professionals involved in Finnish maritime archaeology in different ways. The interviews were semi-structured and explored the interviewees' educational and professional backgrounds, work histories, and research topics. The results indicate that the field of maritime archaeology in Finland is highly interdisciplinary and that people often have experience in both research and heritage management. This is partly due to the small amount of people trained as maritime archaeologists who have had to assume roles equally in research, teaching, heritage management, and private companies. The fields of expertise of Finnish maritime archaeologists include protection and management of cultural heritage and heritage legislation, maritime ethnology, medieval shipbuilding and seafaring, maritime archaeology of Suomenlinna, diving, and underwater documentation. The number of dissertations on topics related to maritime archaeology is still very low in Finland. Only one dissertation has been published (Koivikko 2017) so far. A few more dissertations are in preparation, all planned for submission at the University of Helsinki.

This expertise will also be utilised in teaching of maritime archaeology at the University of Helsinki, and many of the interviewed professionals have been, continue to be, or will be

included as lecturers or contributors on courses planned for teaching.

## **Commercial maritime archaeology organisations in Finland**

There exist a small number of private companies in Finland which offer maritime archaeological services, mostly surveying for infrastructural development and land use as well as documentation of underwater sites. Most often, these projects are undertaken to fulfil the needs of cultural heritage management, but they are also significant in terms of education. In this respect, private companies are central for the development of underwater documentation, such as 3D imaging.

The needs of the private sector have to be anticipated in teaching, and skills that are useful for employment in the private sector have to be included in teaching. In terms of sold services, the private sector is not considered competition to academia. Sold services should not be part of the strategy of maritime archaeology at the University of Helsinki, and the questionnaire included in this research (see also below) shows that sold services are not considered important for the long-term success of a university degree program.

## **Avocational maritime archaeology communities in Finland**

The role of avocational and hobby diving communities in Finland has been significant for underwater heritage management but also for the development of research in maritime archaeology. There exists a large base of hobby divers, diving associations, and other members of the public with interest in maritime and underwater heritage, such as Teredo Navalis and the Finnish Maritime Archaeological Society. The situation today is similar to that of the 1960s and the 1970s. Hobbyists find a lot of new underwater sites, and also crave for information regarding those sites. Often these hobbyists turn to the Finnish Heritage Agency in the hope of information, but presently, the resources for research in heritage management to produce the kind of information that hobbyists want is insufficient. This can lead to credibility issues in the eyes of the public and, in order to anticipate the needs of the avocational communities and the heritage sector, both have to be included in planning of teaching. The challenge will be to balance the contents of a curriculum so that it promotes research that is applicable in heritage management, but which also allows for academic freedom.

The yearly field course organised by Hanko Summer University has also been instrumental in bringing maritime archaeologists and hobbyists together, and opportunities for similar collaboration and communication to exist in the future have to be secured. To this end, teaching of field skills is possible to organise in Helsinki by developing collaboration with Hanko Summer University and University of Turku.

# 5

## Teaching and training in maritime archaeology

---

### **Higher education institutions in maritime archaeology globally**

Education and training from non-academic courses to complete degree programs (bachelor, master, and doctoral level) in topics related to maritime archaeology are offered by universities and scientific societies around the globe, and the subject is taught differently according to historical and contextual specifics. Some institutions offer a degree that, in terms of teaching maritime archaeology, is integrated with teaching in other fields, such as history, archaeology, and heritage studies, while other institutions offer a degree that is fully independent. Integrated programs often emphasise academic skills such as critical theory and writing skills whereas those with stand-alone curriculums usually concentrate on teaching of field skills and project management.

Lists of institutions that offer education in maritime archaeology have been kept since at least the early 1990s. An initiative for the establishment of an association for those involved in the teaching of maritime archaeology was made at the sixth meeting of the *International Symposia on Boat and Ship Archaeology* in Roskilde in 1991 (McGrail 1992). A call



was then issued for institutions that offer teaching in maritime archaeology (Linder & McGrail 1992). Based on their call, Linder and McGrail (1994) compiled a list of university courses in maritime archaeology consisting of seven undergraduate (BA) and 12 graduate (MA) programs in 15 institutions (the list is also published in McGrail 1995).

Since the early 1990s, the amount of degree and training programs has multiplied. UNESCO (2010) provides an exhaustive list of all available training in maritime archaeology. The list is occasionally updated and different versions of it can be found on the UNESCO website. A list of university education in maritime archaeology is likewise maintained at [maritimearchaeology.com](http://maritimearchaeology.com), but just like the UNESCO list, it appears outdated and includes discontinued programs.

Instead of providing an exhaustive list of all available training and education in maritime archaeology, this chapter lists a limited selection of both existing and discontinued programs with a brief description of the program in question. The information is based on details available on the respective institutions' websites, on the responses to our online questionnaire, as well as on email correspondence with professionals who are or have been involved in the development of teaching in those institutions. The purpose of listing and describing both existing and discontinued degree programs is to highlight some of the factors that might contribute to the long-term success of a degree program in maritime archaeology. Some of the programs have or had a concentration on theory while others focus on the teaching of methodological skills more readily applicable in field archaeology and in the protection and management of maritime and underwater cultural heritage.

Some existing and discontinued programs are considered relevant for the development of teaching in Helsinki and are therefore listed here also for that reason. For example, at Leiden University teaching of maritime archaeology is intimately integrated with teaching of archaeology and heritage studies, and this integration is seen at Leiden as crucial to the long-term success of the program. The situation in Leiden is similar to that in Helsinki. Archaeology and heritage studies exist also at the University of Helsinki and teaching of maritime archaeology will most likely benefit from close integration with these subjects.

From the North, University of Southern Denmark (SDU) in Esbjerg and Norwegian University of Science and Technology (NTNU) in Trondheim are included because their programs were cancelled for one reason or another. Their inclusion will therefore provide a starting place for the evaluation of the possible risk factors that can undermine the long-term success of a degree program.

The Alexandria Centre for Maritime Archaeology and Underwater Cultural Heritage at Alexandria University in Egypt was created as a stand-alone program (as opposed to the integrated approach) with a large EU grant in 2007. When the program was created, a survey of existing programs in maritime archaeology was conducted, which makes the program interesting for the purposes of this report. Khalil (2008) offers an account of the program, but unfortunately, we were not able to reach him for a closer interview. University of Southampton, and in particular Lucy Blue, was instrumental in creating the program at Alexandria University, but unfortunately, we were not able to interview anyone at Southampton either. This was unfortunate

given the central role of Southampton in the field of higher education in maritime archaeology.

Some programs are included simply because an account of them could be found in literature on higher education in maritime archaeology or because their websites include clear descriptions of the program or detailed curriculum information. Such programs are included in the list to highlight the variety of concentrations in teaching of maritime archaeology.

## **Selected existing maritime archaeology degree programs**

### **Leiden University**

The following information is based on an interview with Martijn Manders (associate professor in maritime archaeology at the Faculty of Archaeology) at Leiden University on February 14, 2020.

Leiden University is the only institution to offer teaching in maritime archaeology in The Netherlands after teaching of maritime archaeology ended at University of Groningen. The program has a global focus with a lot of activity, for instance, in Indonesia, Surinam, China, and the Caribbean (based on the fact that there are roughly 16 000 Dutch wrecks in different parts of the world).

Leiden University offers degrees in maritime archaeology on bachelor, master, and doctoral level. Teaching of maritime archaeology is arranged at the Faculty of Archaeology which divides into three departments: world archaeology, archaeological

sciences, and heritage and society. Organisationally, maritime archaeology falls under the department of heritage and society. Heritage management aspects are emphasised in teaching, but maritime archaeology is also deeply integrated with world archaeology and applied archaeology. All teaching in maritime archaeology is in English. Leiden University also has 10–15 doctoral students working on a maritime archaeology related dissertation.

Martijn Manders is the sole teacher since 2010, and works part time (two days per week) at the university, while most of his time is spent working in governmental heritage management (three days per week), which is his employer. This dual position allows for efficient anticipation of the needs of the heritage sector and the inclusion of corresponding skills in the curriculum.

### **Bachelor's degree**

A bachelor's degree is three years. In their first year, bachelor students attend one mandatory introductory lecture on maritime archaeology. This lecture is part of a large introductory course with about 100 attendees and allows maritime archaeology to showcase the subject to a large number of prospective students. Of all students who enrol for the bachelor's degree, 70 % are international students and 30 % are Dutch. Students from outside the EU pay an annual fee of 7000–8000 €, while EU students pay 3000–4000 €.

In their second year, those bachelor students with an interest in maritime archaeology attend one optional course on maritime and underwater archaeology. This course lasts eight weeks and includes two hours of lectures per week and additional literature. The course is 5 ECTS points and attracts about 30 students.

Also in their second year, bachelor students can take an optional seminar in maritime archaeology. This is a practical seminar of one or two weeks where students design and conduct a small research project (for example, the maritime biography of a city). The course is 10 ECTS points and attracts about 10 students each year.

In their third year, bachelor students write a thesis on a topic of their choosing and complete an internship, for example, with the government or by conducting fieldwork with a commercial company. Students who successfully complete their studies in maritime archaeology will get a diploma with a maritime archaeology marking.

There is also a combined minor subject in development at Leiden University. The module will consist of 15 ECTS points in maritime archaeology and 15 ECTS points in history.

### **Master's degree**

Entering master's level studies in maritime archaeology at Leiden University does not require a bachelor's degree with a maritime archaeology marking or specialisation. The distribution of international and Dutch students is about 50/50 in the master program. There are two options for pursuing a master's degree: a 1-year regular master's degree and an extended 2-year research master's degree. In their first year, all master students, usually 20–25 students in total, attend one lecture on a topic related to maritime archaeology and a full 5 ECTS point course on underwater archaeology and maritime landscape. Also in their first year, students do an internship and write a thesis. Those students with a high enough marking and interest in the research master attend a research seminar connected to their thesis. The

second year of the research master is reserved for the writing of the thesis. Leiden does not incorporate diving in their teaching, but many students have a diving background. Those interested in diving will receive their training by working for a commercial maritime archaeology company.

## **University of Southampton**

University of Southampton in the UK is one of the leading European institutes in maritime archaeology with a steady enrolment of students. Since the early 1990s, Southampton has offered a bachelor's degree (3 years) in archaeology with focus in maritime and underwater archaeology. Also, a dedicated master of arts or a master of science in maritime archaeology (1 year) with cores and compulsory courses in maritime archaeology (thesis, maritime aspects of culture, applied maritime archaeology), and optional courses that include maritime themes, such as nautical archaeology, marine geo-archaeology, maritime museums and heritage management, and ancient Mediterranean seafaring. The Centre for Maritime Archaeology (CMA) operates within the University of Southampton and is responsible for research and training. As characterised by Jon Adams (2008), teaching at Southampton is research-led, that is, they aim to teach what maritime archaeologists do and have done. The inseparability of theory and practice is taken for granted (Sturt 2008).

A visit to University of Southampton with Lucy Blue was planned for spring 2020, but all plans were dropped due to COVID-19.

## **Bournemouth University**

Maritime archaeology at Bournemouth University in the UK has been an active subject since October 2001. Bournemouth offers a BSc in Marine Archaeology (since 2004), and a MSc in Maritime Archaeology (since 2008). Teaching is research-based and concentrates on practical training, but students are not expected to dive as the BSc programme includes units undertaken in either a terrestrial or inter-tidal environment (Parham & Palma 2008, 59–60). In this sense the program aims to strike a balance between “vocational skills, academic knowledge and ‘softer’ transferable skills” (Parham & Palma 2008, 68; see also Parham et al. 2008).

## **University of Oxford**

School of archaeology at University of Oxford in the UK offers a MSc in archaeology with a maritime archaeology specialisation. Teaching focuses on ancient seafaring and maritime communities, especially the ancient cultures of the Mediterranean. University of Oxford also has The Oxford Centre for Maritime Archaeology (OCMA) that offers post-graduate courses in maritime archaeology and provides post-graduate supervision (Cole 2004). Teaching is also given in undergraduate and graduate levels.

## **University of Nottingham**

The Underwater Archaeology Research Centre (UARC), established in 2004, serves as a locus for underwater archaeological

teaching and research at the University of Nottingham in the UK. The centre is focused on developing innovative techniques in the survey of underwater cultural heritage sites.

### **Texas A&M University**

Texas A&M University in the US has offered a master level Nautical Archaeology Program (NAP) since 1976. The program, originally set up by George Bass, focuses on the history of wooden ship construction, seafaring, maritime commerce as well as the techniques used to record, analyse, and conserve the remains of these activities. Students take courses in archaeology and anthropology, but the overall concentration of the program is practical and underwater-oriented.

### **East Carolina University**

East Carolina University in the US offers a Maritime Studies master's degree. The program is organisationally part of the Department of History, but in terms of teaching, the program is stand-alone. Teaching includes two informal concentrations: nautical and underwater archaeology and maritime history. Although the program is heavily oriented towards teaching field methodology, heritage management, and interdisciplinary research (biology, geology, and geography), it has a strong humanistic focus and emphasis on historiography and history. This allows students to develop their writing skills in addition to field skills. One compulsory introductory course concentrates on theory of maritime archaeology, and students are expected to include some sort of theory in their master's thesis, but theory



is waived in other courses. Students in the Maritime Studies program are expected to complete a diving course as part of their diploma.

### **Flinders University**

Flinders University in Australia has a stand-alone program and has taught maritime archaeology at undergraduate level since 1996 and at postgraduate level since 2002. The program also provides supervision for MA and PhD students. The Graduate Program in Maritime Archaeology (GPMA) is the only named degree program of its kind in Australia. Study options are: 1) a 6-month graduate certificate in maritime archaeology, 2) a 1-year graduate diploma in maritime archaeology, 3) a 1.5-year master of maritime archaeology, and 4) a 2-year master of maritime archaeology. The program is also intensively involved in the development of teaching that does not fit the traditional model of on-campus teaching, such as field schools, avocational training programs, distance learning through internet, and practicums, internships, and fellowships (Staniforth 2008a; 2009).

### **Alexandria University**

The Centre for Maritime Archaeology & Underwater Cultural Heritage at Alexandria University in Egypt is a stand-alone training program with focus on underwater archaeology and cultural heritage (Khalil 2008). The centre offers a 1-year Graduate Diploma in maritime archaeology and UCH, and a 2-year Master of Arts in Maritime Archaeology. As we saw in

Chapter 3, the history of Egyptian maritime archaeology shares some similarities with the field's development in Finland.

### **University of Haifa**

University of Haifa in Israel teaches interdisciplinary Master of Arts (thesis and non-thesis track) and PhD programs for BA and MA holders in Hebrew at the Department of Maritime Civilizations. Teaching is focused on Mediterranean history, coastal and underwater archaeology, and complemented with courses in marine ecology and geomorphology. The department also attracts a steady flow of international students with an International MA Program in Maritime Civilizations.

### **Södertörns högskola in Stockholm**

Södertörn University in Sweden is currently the only institution in Scandinavia to offer teaching in maritime archaeology. The subject has been taught since 1997 with focus on the Baltic Sea region. Currently only one distance learning course in maritime archaeology is offered. Also at Södertörn University is located MARIS, a research institute for marine archaeology with a particular focus on the Baltic Sea and the surrounding region.

## **Selected discontinued maritime archaeology degree programs**

### **University of Southern Denmark in Esbjerg**

University of Southern Denmark (SDU) in Esbjerg offered a postgraduate programme in maritime archaeology and heritage management between 2005–2018. The programme was internationally oriented and all teaching was in English. The course was explicitly vocational and aimed to provide students with the practical skills needed for employment in heritage management, consultancy, and archaeological contract work, including environmental impact assessments, excavation underwater, as well as aspects of economics, law, and management (Maarleveld 2007; Maarleveld & Auer 2008; Ransley 2008).

Although the program aimed to establish a sound theoretical academic foundation (Maarleveld & Auer 2008, 72), the practical nature of the program made it clearly diving-oriented, and SDU offered a commercial diving qualification to its students. As education is free in Denmark, the maritime archaeology master's programme was free of charge for students from the EU, while non-EU students paid an annual fee.

The program was popular among students, but when Thijs Maarleveld retired, he was not replaced, and the program was discontinued in 2018. Teaching that used to exist at SDU is currently being re-established at Aarhus University in Denmark. A meeting with Thijs Maarleveld, former professor of maritime archaeology at SDU, as well as with current staff of the maritime archaeology program being developed at Aarhus University, was planned for spring 2020, but was cancelled due to COVID-19.

## **Norwegian University of Science and Technology (Trondheim)**

Norwegian University of Science and Technology (NTNU) in Trondheim offered a 2-year international master's degree program in maritime archaeology in Trondheim between 2003–2010. The program was set up by Marek Jasinski and was quickly joined by Christer Westerdahl. Teaching was in English, and the program replaced maritime archaeology courses given in Norwegian since 1992 as part of the bachelor's degree in archaeology. Furthermore, the international maritime archaeology program was entirely independent from the bachelor's degree teaching which was offered in Norwegian.

Jasinski and Søreide (2008) write that the program aimed to combine teaching of technical underwater skills with a more theoretically sophisticated understanding of maritime archaeology as the holistic study of humans' affinity with the sea (see Jasinski & Søreide 2008 for full curriculum). Given professor Westerdahl's role as the originator of the theoretical concept of maritime cultural landscape, this was a natural concentration.

The program relied on external teaching, but the quality of external lecturing and the general absence of the external staff was heavily criticised by the students (pers. comm. C. Westerdahl, April 18, 2020). NTNU administration was very sensitive to student criticism which led to the program's discontinuation. Some of the existing teaching in maritime archaeology was, however, kept and offered as part of an archaeology degree program with emphasis on historical archaeology.

Presently, there are plans to set up a degree program or courses in the use of underwater robotics and sensors in marine

archaeology at NTNU Trondheim. This teaching will not be connected to teaching of archaeology, and marine archaeological research activities are integrated with marine technology, marine biology, and cybernetics departments.

### **University College London**

University College London (UCL) in the UK offered a master's degree program in maritime archaeology between 2005–2012. The main themes were ones of global maritime culture and society, so the course ranged broadly from prehistory to the 20th century around the world. This enabled the course to link with other courses and research at the Institute. Students had to take two core modules and two optional modules across their one year of study, along with a 20 000-word dissertation. The theoretical concentration also meant that there were no formal fieldwork requirements, and only modest attention paid to practical skills such as field practices and project management. This reflected the wider philosophy at the UCL Institute of Archaeology at the time with its focus primarily on the theory and philosophy of archaeology.

The program was able to attract steady student enrolment mainly because it was based at UCL, which is a prestigious institution in a large European capitol. Regardless of the multidisciplinary opportunities offered by the institution, some students were disappointed with the lack of practical training. Many students opted to go to Southampton instead where more practical training is implemented. The program was eventually shut down not because of lack of or unsatisfied students, but because staff left and was not replaced by the institution.

## **Aberdeen University**

Aberdeen University in the UK used to run an undergraduate module on submerged landscapes (Wickham-Jones 2018). The program was fully integrated with teaching in archaeology and concentrated on how maritime landscapes are managed in different parts of the world. The program was cancelled after the director retired and was not replaced by the institution.

## **University of Bristol**

University of Bristol in the UK used to offer two programs related to maritime archaeology: a master's program in Maritime Law and a master's program in Maritime Archaeology and History. The master's program in maritime archaeology, supervised by Mark Horton, involved a taught program and a dissertation, and it aimed to combine a historical and theoretical introduction to maritime archaeology with practical experience. The program included optional practical training in underwater archaeology, as well as an introduction to artefact studies, historical boats and ships, and field trips. The program emphasised interdisciplinary approaches and current debates in academic and professional maritime archaeology. Voluntary work for various maritime conservation projects around Bristol was also encouraged and supported. Like in many other institutions, the maritime archaeology program at the University of Bristol was cancelled partly due to staff issues and partly due to declining student figures that led to a lack of funding (pers. comm. V. Heyd, October 29, 2020).

## **University of Wales, Bangor**

University of Wales, Bangor (now Bangor University) was the first in the UK to offer a complete degree (BA) programme in maritime archaeology in the early 1990s. Teaching was heavily oriented towards the underwater and included courses in underwater methodology, ship architecture, and wreck documentation (see Bangor 1992 for curriculum). Currently, no courses or degrees are offered in maritime archaeology at Bangor University, and the reasons for the program's cancellation remain unknown to us.

## **Societies and associations with courses and training in maritime archaeology**

### **Nautical Archaeology Society**

In the global context, the Nautical Archaeology Society (NAS) is one of most important not-for-profit organisations that offer practical training to students, professionals, and members of the public in maritime archaeology field skills. NAS courses are taught by 30 organisations in 23 countries, including universities, heritage agencies, and related societies. Most importantly in the academic institutional setting, NAS is used to fill the gaps in their practical training.

In Finland, the Finnish Maritime Archaeological Society organises NAS training courses. The Finnish Heritage Agency is translating the NAS handbook *Underwater Archaeology: The NAS Guide to Principles and Practice* into Finnish.

# 6

## Assessment of factors contributing to long-term degree program success

---

### **Online questionnaire to teaching professionals in maritime archaeology**

To collect information on what factors are considered important for the long-term success of a degree program, an online questionnaire was sent personally to 45 people (excluding Finnish actors). The recipients included professionals in higher education who are or have been involved in curriculum development in maritime archaeology but also individuals working at museums and in maritime archaeological societies. Of the 45 recipients, 14 submitted the form, which resulted in a response rate of 31%. This is on the higher end, as it is not uncommon for online questionnaires to have response rates of 10–20 % (Fan & Yan 2010; Van Mol 2017). The responses are analysed here in mass and those from university teachers and museum workers, for example, are not distinguished from each other.

In addition to name and affiliation or position information, the questionnaire included multiple choice and open questions in three categories: A) institutional identity, curriculum emphases,



and level of integration with other teaching; B) program funding, student satisfaction, and collaboration with actors outside academia; and C) strengths, risks, and other factors contributing to the long-term success of a degree program. The absolute and relative distributions of answers are indicated in a chart connected to each question with multiple choices.

### **A: institutional identity, curriculum emphases, and level of integration with other teaching**

*1. Describe the position of your maritime archaeology degree program in the context of archaeology. What are the fields of specialisation of your degree program?*

The respondents' affiliated institutes included universities with existing and cancelled programs in maritime archaeology (11 responses), museums (1 response), and maritime societies (2 responses). Universities offer academic training in maritime archaeology each with their own geographical or subject specialisation, while the main task of museums is to offer practical training opportunities to students. Maritime archaeology societies, such as the Nautical Archaeology Society, are not-for-profit organisations that offer non-academic training programs to members of the general public, archaeology students, and professionals in all aspects of underwater and foreshore archaeology.

*2. How does your degree program aim to stand out in respect to maritime archaeology degree programs with a similar specialisation in other institutes?*

Academic degree programs are often divided in terms of specialisation. Some programs, such as the discontinued maritime archaeology program at UCL, rely on being based at a prestigious institute. Furthermore, some programs, such as the discontinued programs at NTNU and UCL, concentrate on teaching of theory rather than field skills, and in these cases, dedicated underwater training modules may have been impossible to offer due to high costs or governmental regulations. In turn, some institutions are explicitly field oriented and concentrate on teaching of underwater skills. Interestingly, many institutions rely on specialisation in similar aspects. Many respondents report that their program aims to stand out by concentrating on providing field training, training in cultural heritage management, and by being interdisciplinary. In many cases, interdisciplinarity emerges as a product of the program sharing organisational ties with other disciplines, such as history, heritage studies, biology, engineering, etc. Geographical emphases on the other hand often follow naturally from the location of the institution and the history of the respective nation. Leiden University, for instance, has a lot of activity in former Dutch colonies.

*3. Describe the level of integration of teaching in maritime archaeology with (possibly) existing teaching in archaeology and/or related disciplines within your institute.*

Integration with other teaching is a factor that seems to divide programs in two, and respondents often describe their program as stand-alone or integrated. Some institutes, such as Flinders University and Alexandria University, have stand-alone programs, while others are deeply integrated into teaching in archaeology and museum studies, for instance. In general, poor integration with other teaching in archaeology at the same institute is seen as a weakness by many who teach maritime archaeology. At Leiden University, close integration of maritime archaeology with teaching in archaeology, history, and heritage studies is considered crucial to the program's long-term success.

Level of integration within an institution is also partly dependent on organisational structures. Those programs that are or were part of an archaeology, history, or classics department tend to integrate those subjects in their teaching, which naturally also contributes to the contents of teaching and therefore to the understanding of what constitutes interdisciplinarity. Based on the responses, it is possible that stand-alone programs are more often interdisciplinary in terms of underwater methodology, whereas integrated programs tend to be interdisciplinary in terms of being connected to other disciplines within the humanities.

*4. Describe the level of integration and collaboration with other disciplines and/or degree programs in other institutes.*

This question is partly related to question 3, but whereas collaboration between disciplines within an institution often entails collaboration between, for example, archaeologists, historians, and biologists, collaboration with disciplines outside the home institution often means organisation of field courses and teaching of practical skills, such as diving and underwater excavation. In this respect, one important aspect is the role of the Nautical Archaeology Society (NAS). In the global context, NAS is the only organisation that offers a training program that is explicitly based on teaching of practical fieldwork skills. Currently, NAS has a wide range of partnerships with other community archaeology organisations, diving schools, and universities in the UK and around the world: NAS courses are taught by 30 organisations in 23 countries. In practise, NAS commissions experts in a given field to teach their courses and therefore works with related disciplines such as marine engineering, conservation, and history.

As pertains to collaboration with other academic institutions, maritime archaeology at the University of Helsinki is currently investigating the possibilities of establishing joined courses with Leiden University, Aarhus University and Hanko Summer University (University of Turku). All such collaboration would be oriented towards providing field training, whereas teaching of academic skills and theory would be provided by the University of Helsinki staff.

*5. If teaching of maritime archaeology is integrated with archaeology at your home institution, what are the fundamental differences in the contents and skills emphasised in teaching in archaeology on the one hand and maritime archaeology on the other?*

All respondents with integrated programs contend that the difference between archaeology and maritime archaeology is a matter of specialisation and that maritime archaeology and archaeology are perspectives to the same issue. This means that the intellectual skills such as theory are largely transferrable between archaeology and maritime archaeology, whereas specialisation entails skills in particular methods, most importantly those used in underwater archaeology.

On a related note, the matter of integration raises a question about the particular importance of maritime archaeology. Maritime archaeology deals with very special kinds of materials and perspectives that land archaeologists rarely familiarise themselves with in their studies. However, maritime materials are routinely found on land and the Salme ship burial in Estonia, for example, was not initially identified as a ship burial. Basic knowledge in boat and ship construction, for instance, is therefore important also for a land archaeologist. In this sense, the importance of maritime archaeology is comparable to any other aspect or subfield of archaeology, such as historical archaeology.

*6. What are the possible gaps in teaching that might arise from geographical, chronological, or thematic emphases of the degree program? If there are gaps in teaching topics, are they intentional, or are gaps even considered problematic in the first place?*

Gaps in teaching are not considered problematic and the concentration of the program (or the ensuing gaps in expertise) often occur naturally as a result of the background of the staff. Furthermore, as maritime archaeology is often taught in the master level rather than bachelor level, students enter the field with their own research topics and ideas. It is therefore more important for the staff to have a wide understanding of the breadth of maritime archaeology rather than expert knowledge in as many topics as possible. This will enable the teacher to accommodate students with different backgrounds effectively. Students are also not expected to graduate “fully formed”, which is why teaching of learning skills is considered important in academia.

*7. How is balance sought between teaching academic skills such as theory and critical self-reflection and practical skills such as field practices and project management? Does the program have a clear orientation towards one or the other?*

Respondents report that balance is actively sought between teaching of theory and skills. Programs with a clear practical focus often include one compulsory introductory theory course that students have to take before they can proceed to field courses. These programs often also require the student to include some kind of theory in their thesis.

Those programs with a clear theory orientation, such as UCL, offer very limited opportunities for students to learn field skills, but their strength is in being able to accommodate students with interest in broad maritime themes rather than specific regions or methods. There is no correlation between long-term program success and orientation towards field methods or theory.

Also noteworthy are programs with a clear orientation towards heritage management. These include the Alexandria Centre for Maritime Archaeology & Underwater Cultural Heritage at Alexandria University in Egypt and the UNESCO programme at Tokyo University of Marine Science and Technology. Both programs are predicated on the 2001 UNESCO Convention on the Protection of the Underwater Cultural Heritage.

*8. To what extent do the contents and aims of the curriculum of your maritime archaeology degree program correspond with or follow the general strategy of your institute?*

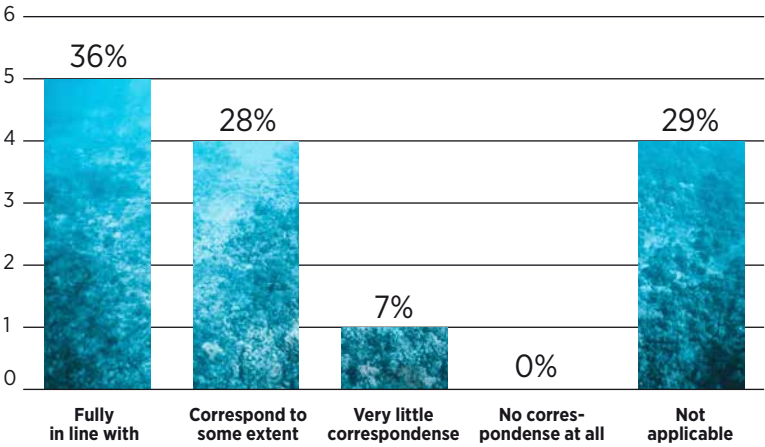
The majority of respondents affiliated with a university report that the contents and aims of their maritime archaeology course are fully in line with or correspond to some extent with the general strategy of their institute (Figure 1). None of the respondents elaborated on what it means in their case.

When designing the curriculum for University of Helsinki, in addition to language issues and ethical guidelines, one important document to consider is the *Regulations of the University of Helsinki*, which states that

“University-level teaching shall be based on scholarly research and exploit research information relevant to

teaching. To safeguard the connection between research and teaching, members of the teaching and research staff shall both teach and conduct research. The objective of teaching and academic guidance shall be student-oriented profound learning that provides a basis for lifelong learning. The University shall operate in close interaction with other actors in society without compromising its independence. In attending to its core duties, the University shall cooperate particularly with other universities and research institutes.” (University of Helsinki 2018)

Research-based teaching and collaboration with other actors in the society are also stressed in this report and both are being actively pursued in maritime archaeology at the University of Helsinki.

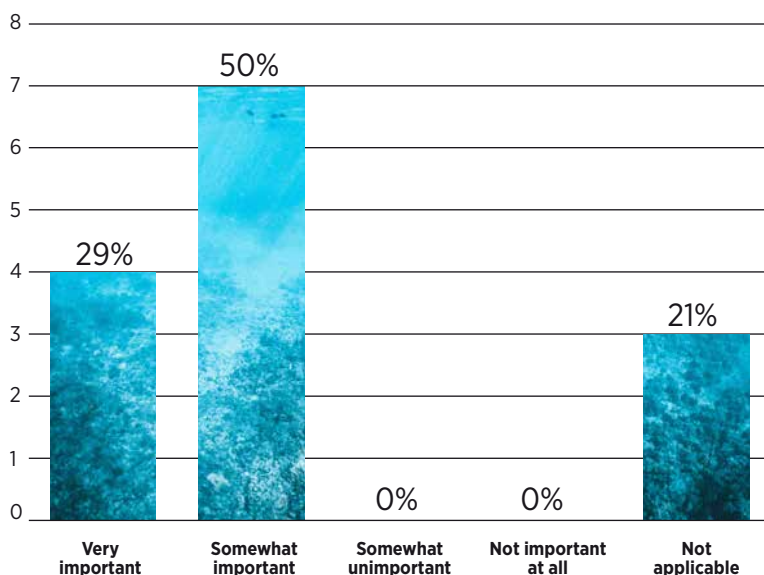


**Figure 1.** To what extent do the contents and aims of the curriculum of your maritime archaeology degree program correspond with or follow the general strategy of your institute?



*9. In terms of physical settings and architecture, how important do you feel it is for the long-term success of their collaboration that departments and researchers are situated close to each other?*

Most respondents consider physical proximity to other departments and researchers somewhat important (Figure 2). Only one respondent elaborated on the nature of the matter. Their department was located in the same corridor with a science museum, but for various reasons collaboration could not be established.



**Figure 2.** In terms of physical settings and architecture, how important do you feel it is for the long-term success of their collaboration that departments and researchers are situated close to each other?

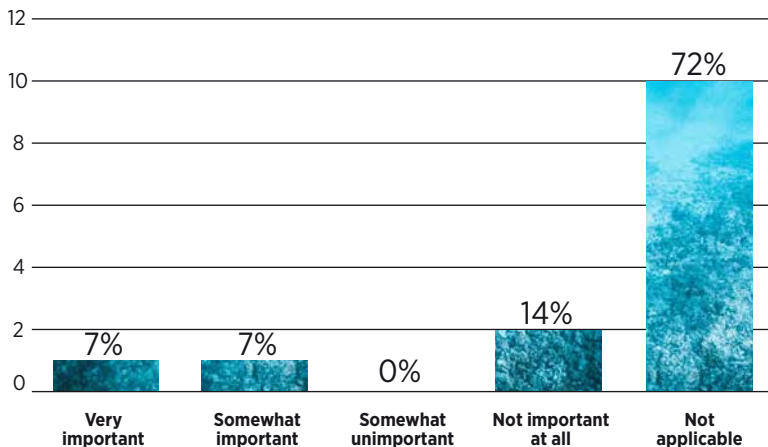
## B: PROGRAM FUNDING, STUDENT SATISFACTION, AND COLLABORATION WITH ACTORS FROM OUTSIDE OF ACADEMIA

*10. How is the degree program funded? If applicable, to what degree does funding depend on tuition fees paid by students?*

University programs in maritime archaeology have three principal sources of income: 1) student tuition fees determine a department's funding partly where those are collected, 2) institutional support, which ultimately depends on governmental policies (the maritime history module in Helsinki was closed partly because of budget cuts issued by the Finnish government), and 3) external grants won by the department. There is no apparent correlation between funding structure and long-term success of a program.

*11. If your home department offers sold services in maritime archaeology, how important are they to the economic viability of the program?*

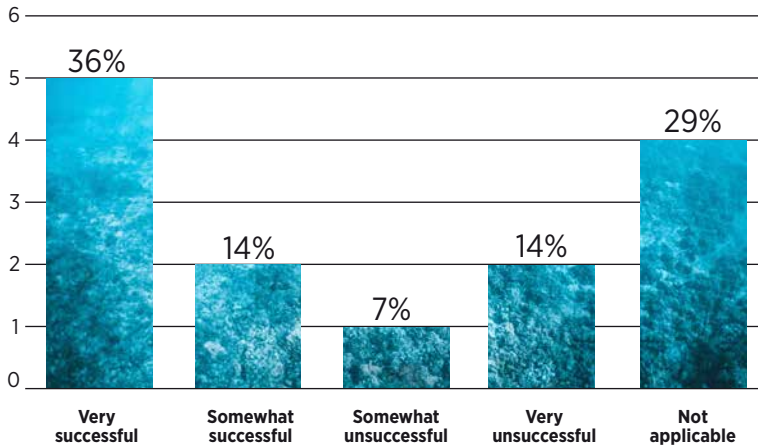
This question is partly connected to question 10. Interestingly, however, the majority of respondents report that sold services are not important or applicable to the economic success of the program (Figure 3). A university program may not be allowed to sell services, as is the case in Japan, or it may be economically unviable due to the institution's overhead costs, as is the case at the University of Helsinki. Providing sold services will therefore not be considered important for the long-term success of maritime archaeology at the University of Helsinki.



**Figure 3.** If your home department offers sold services in maritime archaeology, how important are they to the economic viability of the program?

### *12. How successful has the program been in attracting student enrolment?*

Respondents affiliated with existing programs at a university or with NAS report success in terms of student enrolment (Figure 4). Some respondents affiliated with museums or discontinued academic programs considered the question not applicable to their situation, but all responses that report unsuccessful student enrolment were affiliated with a discontinued program, such as UCL and NTNU, both of which were shut down partly because of failure in attracting students, but more importantly because retired or relocated staff were not replaced. There is therefore no clear connection between student enrolment and long-term program success, and sufficient student enrolment may be highly context-specific.



**Figure 4.** How successful has the program been in attracting student enrolment?

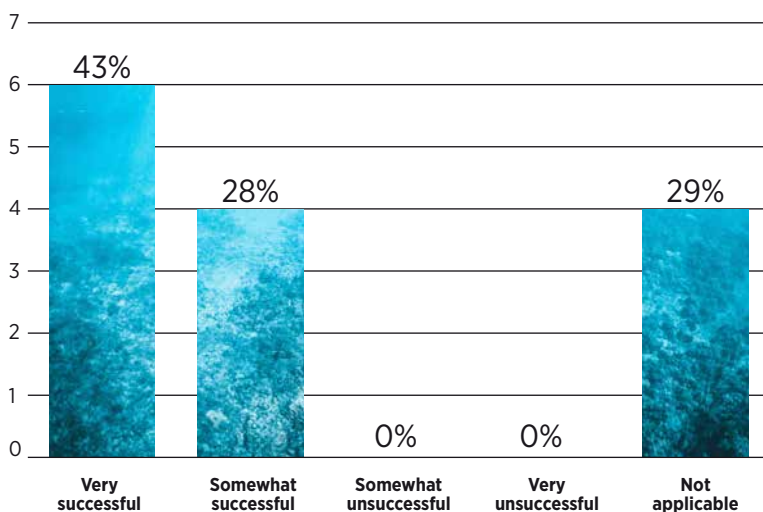
*13. Is particular effort made to attract students or does the degree program stand on its own in this respect?*

High-profile institutions like Southampton, Texas A&M, and East Carolina University attract sufficient student enrolment and advertising the program is unnecessary. Some respondents report that their programs are advertised occasionally, and some contend that more effort could have been or should be made to make the program, such as the now-cancelled program at NTNU, more widely known.

Advertising the program is not only a matter of public perception, as a course or program in maritime archaeology can go unnoticed to enrolled students who nevertheless might be interested in the subject. Special effort should therefore be made to make the program known also to existing students within the home institution.

*14. How successful has the program been in fulfilling students' differing expectations about learning maritime archaeology?*

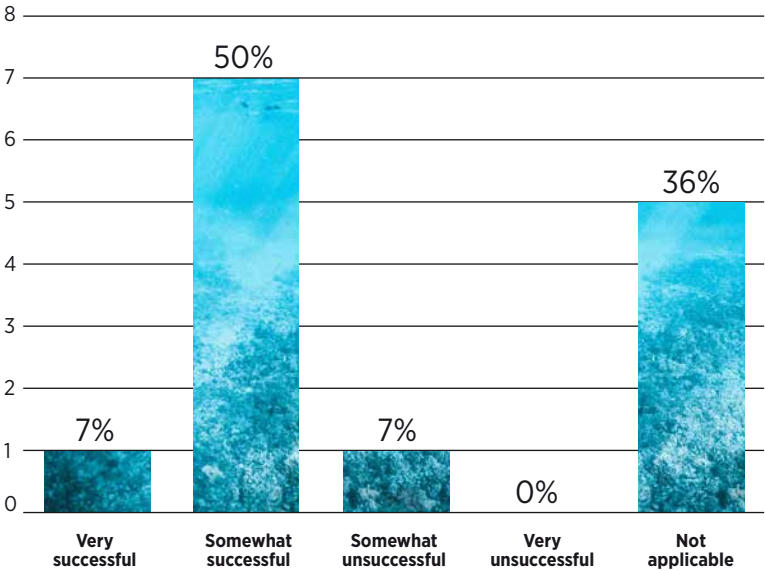
In general, respondents report success in fulfilling students' expectations (Figure 5). Importantly, those affiliated with cancelled programs do not report lesser success in the matter than those affiliated with existing and successful programs.



**Figure 5.** How successful has the program been in fulfilling students' differing expectations about learning maritime archaeology?

*15. How successful has the program been in providing students with skills needed outside academia in commercial maritime infrastructural archaeology or in underwater cultural heritage management?*

The responses indicate that academic programs in maritime archaeology are usually successful in providing students with the necessary practical skills needed in jobs outside academia (Figure 6). One exception is the program at UCL that was very theory-oriented and did not even aim to provide students with field skills.



**Figure 6.** How successful has the program been in providing students with skills needed outside academia in commercial maritime infrastructural archaeology or in underwater cultural heritage management?

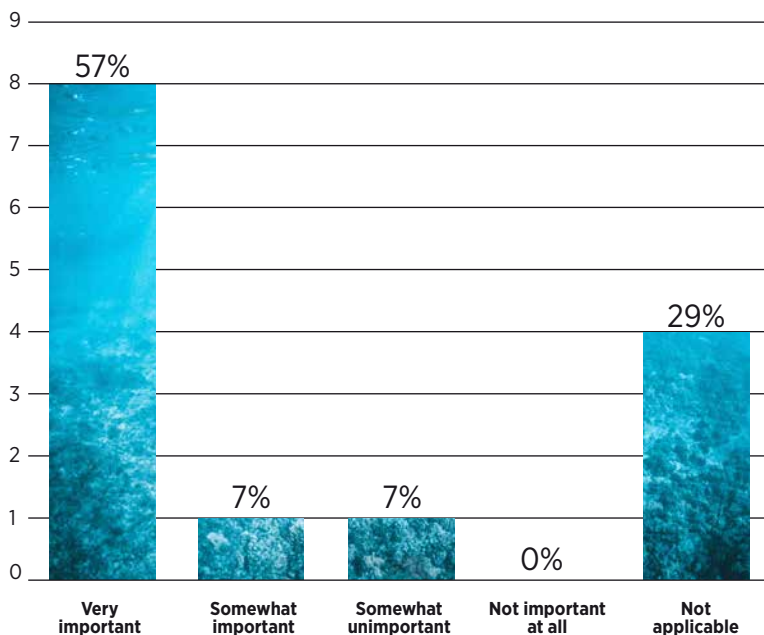
*16. If surveys have been carried out on student expectations and satisfaction with teaching at your institute, how have their results affected planning of teaching in maritime archaeology at your institute?*

This question is related to question 15. Respondents report high satisfaction from students, and that all feedback is taken seriously and modifications in teaching are made to increase the quality of teaching. One respondent points out that all changes have to be implemented slowly and carefully. Two respondents report that no surveys were or have been done on student satisfaction.

According to the *University of Helsinki Faculty of Arts career monitoring report for 2003–2013* (University of Helsinki 2019), archaeology students are not satisfied with how their studies prepared them for the requirements of their current job. The majority of those respondents with an archaeology degree feel that employers do not value their education, and would not recommend studying archaeology to others.

*17. How important do you feel collaboration with sectors outside academia is to developing teaching that can successfully anticipate their needs?*

Most respondents affiliated with academic programs feel that it is very important to establish collaboration with actors outside academia in order to prepare graduates with skills needed in non-academic positions (Figure 7). Dialogue with actors outside academia, especially with the heritage sector, is also one of the aims of maritime archaeology at the University of Helsinki.



**Figure 7.** How important do you feel collaboration with sectors outside academia is to developing teaching that can successfully anticipate their needs?

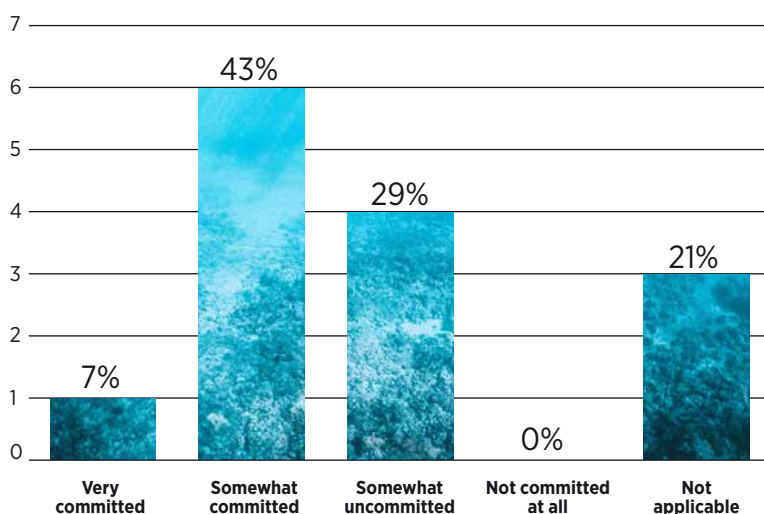
*18. In what ways is your degree program involved in collaboration on developing training to graduates with associations, heritage management agencies, or operators in the private sector?*

Almost all academic programs are involved in collaboration with other academic institutions, the heritage sector, and non-academic training programs like NAS in order to coordinate research and to offer internship to their students. Academic courses also offer opportunities for members of the public to participate in excavations.



*19. How committed do you feel operators outside academia are to develop training and provide graduates and new employees with the skills needed in their jobs?*

Based on the responses, actors outside academia are considered to be somewhat committed or somewhat uncommitted to developing training that would benefit both academia and the heritage or private sector (Figure 8). This is further indication for establishing dialogue and long-term collaboration between involved parties.



**Figure 8.** How committed do you feel operators outside academia are to develop training and provide graduates and new employees with the skills needed in their jobs?

## C: STRENGTHS, RISKS, AND LONG-TERM SUCCESS

*20. What factors, possibly including topics brought up in your responses to the questions above, do you identify as central to your degree program's survival and long-term success within the field of higher education in maritime archaeology?*

Some respondents are concerned about the social value of archaeology and contend that maritime archaeology has to be able to demonstrate its social relevance. Those institutions that have taken the UNESCO 2001 convention as their guiding principle hope that their state would ratify the convention. Ratification would increase funding from the government considerably. Other factors that are considered central for long-term success include staff replacement, the program not delivering what students imagined they would get, and finding a balance between fieldwork training and classroom teaching.

*21. What risks or threats, from within or outside of academia, do you identify that could possibly undermine the long-term success of the degree program?*

These responses are partly related to those given in response to question 20. Listed risks include backstabbing and personal animosity, right wing politics and corporatisation of academia, diminishing funding for the humanities, student employment opportunities, and diminishing disposable income. These are economic and political factors that may be hard to take into consideration in curriculum design (see Chapter 3).

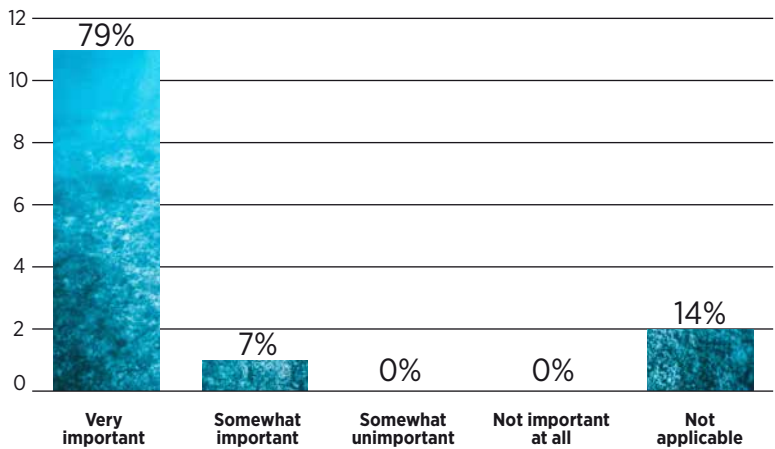
*22. If you identify risks, what are the possible mitigation strategies adopted in your department?*

Respondents list some mitigation strategies for the risks identified above, such as online learning, providing students with a wide skillset, emphasising grant seeking, good press for the institution, and the ratification of the 2001 UNESCO convention. Importantly, as a response to the risks posed by right wing politics, one respondent contends that archaeologists have to start discussing politics. The idea that there is no apolitical archaeology is particularly strong in the US and in the UK. What this entails within the discipline of maritime archaeology is first and foremost the cultivation of critical awareness as opposed to the knowledge for the sake of knowledge attitude. It is therefore becoming increasingly hard to justify the existence of a discipline from an apolitical standpoint. However, maritime archaeology is in a good place because it is directly connected to the management of underwater cultural heritage (see Chapters 2–3).

*23. How important do you feel that prolific publishing and engagement in academic discourse (e.g. conference presentations) by the staff of the degree program are to its long-term success?*

The vast majority of respondents think that publishing and attending conferences by the staff is very important for the long-term success of a degree program (Figure 9). This is not surprising and, given that in Finland a university's funding is partly dependent on the amount of publication by its staff, prolific publishing should also be one of the central aims of the degree program in Helsinki. However, as pointed out by a respondent

affiliated with a cancelled program, the staff of the program were particularly active publishers and nevertheless the program was cancelled. Prolific publishing is taken for granted in today's academia and will most probably not be something that has to be considered when designing a curriculum.

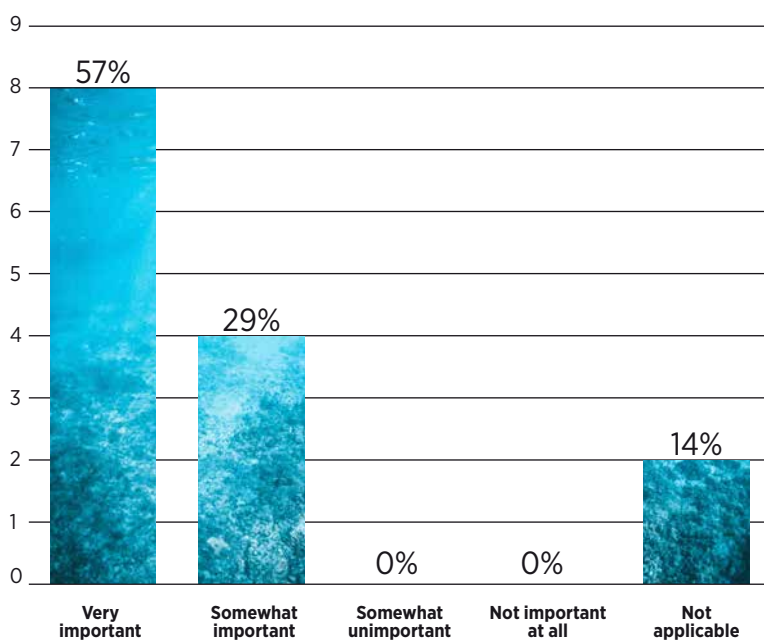


**Figure 9.** How important do you feel that prolific publishing and engagement in academic discourse (e.g. conference presentations) by the staff of the degree program are to its long-term success?

*24. How important do you think it is for the long-term success of the degree program to have staff that consists of researchers and teachers on a variety of career stages?*

This question pertains to staff continuity. Staff retirement and relocation are among the most common reasons for a program to become cancelled (along with student dissatisfaction). It is therefore not surprising that the vast majority of respondents

think that it is very or somewhat important for the long-term continuity of a program to have staff that consists of researchers in different career stages (Figure 10). Departments or programs that have very few members of staff, often maybe only one assistant professor, are particularly vulnerable. The maritime archaeology programs at University of Southern Denmark (SDU) in Esbjerg, Norwegian University of Science and Technology (NTNU) in Trondheim, University College London, University of Copenhagen, and Aberdeen University were discontinued because staff retired or left and were not replaced.

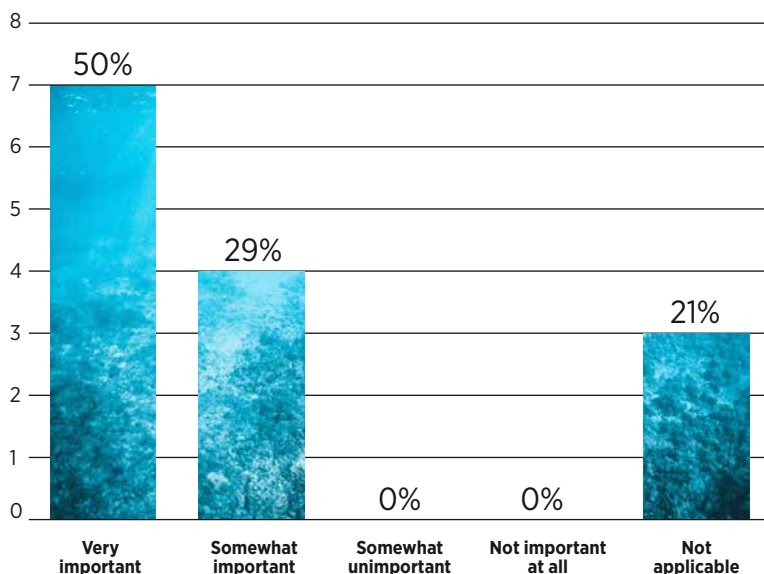


**Figure 10.** How important do you think it is for the long-term success of the degree program to have staff that consists of researchers and teachers on a variety of career stages?

*25. How important do you think it is for the long-term success of a degree program to be able to attract exchange students and postdoctoral or other visiting researchers?*

The responses to this question follow those to the previous one. The majority of respondents think that it is very important or somewhat important to be able to attract exchange students and visiting researchers, and, as pointed out by one respondent, it is not only important to be able to attract exchange students, but to have international degree students as well (Figure 11). At Leiden University, for example, 70 % of bachelor level students come from abroad, whereas in the master level 50 % are international students. The same probably applies to most programs taught in English.

The program in Helsinki is in English and should be able to attract also international students. Studying in Finland is free for EU citizens, while non-EU residents pay a small fee. On a related note, collaboration with Aarhus University for an international joined degree with University of Helsinki is currently being discussed, as is collaboration with Leiden University.



**Figure 11.** How important do you think it is for the long-term success of a degree program to be able to attract exchange students and postdoctoral or other visiting researchers?

*26. What specific measures are taken at your institute to ensure the type of career continuity necessary for the continuing existence of the program?*

One important factor that contributes to the continuity of a program is collaboration with heritage authorities. The University of Haifa, for instance, has developed with the Israel Antiquities Authority an excavation certificate for coastal and underwater excavations. Only holders of the certificate can receive a permit to dig. The situation is similar in Finland where the National Heritage Agency will issue excavation permits only to researchers with a master's degree in archaeology or who have demonstrated

the necessary fieldwork skills. The aim at NTNU was similarly to supply field workers to heritage management agencies in all Nordic countries, and students chose their master's thesis topics accordingly. The UNESCO programme at Tokyo University of Marine Science and Technology likewise counts on Japan ratifying the 2001 convention, which would result in the building of a national maritime institution with a section for research in underwater archaeology.

Other measures mentioned by the respondents include securing student enrolment and increasing the number of openings for postdoctoral researchers.

*27. What have you learned from teaching in maritime archaeology in terms of curriculum design? Are there things you would do differently if you were to design a curriculum from scratch today?*

Respondents affiliated with US and UK universities again stressed that education has to be relevant for other than purely intellectual reasons. In these contexts, a degree in maritime archaeology should aim to equip students with skills and knowledges that have social, political, and environmental relevance. Teachers who are or have been involved in curriculum design report that, if they were to design a curriculum from scratch, it would be less Eurocentric than those currently offered or taught in the past.

Whether these requirements apply in the case of Finland is not straightforward. The academic culture in Finland is radically different from the US and the UK and some political questions, such as those involving ethnic minorities, are not considered as problematic in the Finnish context. However, there are clear signs that also Finnish students are becoming increasingly critical in



this sense, and their needs have to be anticipated in curriculum design by ensuring that critical theoretical skills are represented in the teaching.

*28. Is there anything you want to add that was not brought up in the questionnaire or in your answers?*

This question concludes the questionnaire, and respondents did not see it necessary to raise any further issues.

# 7

## Conclusion – Future Directions for Maritime Archaeology at the University of Helsinki

---

### **Program identity and integration of teaching**

The results of the online questionnaire clearly highlight factors that are considered important or less important for the long-term success of a degree program in maritime archaeology. For instance, collaboration with the heritage sector and other actors outside academia is considered very important for degree program success, while being able to provide sold services is not.

The small number of staff and staff continuity is the most common reason for a program to be discontinued. Programs are often run by just one person and when they retire or leave, the whole program is discontinued regardless of how successful the program has been in attracting students and in training maritime archaeologists with plenty of job opportunities. This is to say that the reasons that lead to a program being discontinued are impossible to anticipate and impervious to any preventive measures taken by the staff to safeguard the continuation of

the program, such as external funding, active publication, or guarantee of student satisfaction.

Whether a program is focused on teaching academic skills and theory or practical skills is not an important factor. Programs have suffered both because they were too heavily invested in teaching of academic theory and despite having a clear orientation towards practical training. Maritime archaeologist who end up in jobs outside academia often have to learn the specific skills on the job rather than as part of their studies at a university.

One important consideration, although not automatically a guarantee of long-term program success, is the integration of maritime archaeology with other teaching at the home institution and with other institutions that offer teaching in maritime archaeology. This is particularly important if the home institution does not have the needed facilities or trained experts to organise underwater training. For maritime archaeology in Helsinki, collaboration has been investigated in order to organise field training with Hanko Summer University, as well as to implement joint courses with Leiden University and Aarhus University. In fact, much of the work done during this project has aimed at the establishment of a wide network of contacts and collaboration.

Integration with disciplines like archaeology, heritage studies, and history is important for the anticipation of job opportunities in other disciplines as well as for the understanding of the wider significance of maritime archaeology in the contemporary society. Maritime archaeology and history seem to be a particularly strong combination. East Carolina University is in the history department, Leiden University is setting up a joint minor subject with maritime archaeology and history, and when the degree

program in maritime archaeology at NTNU Trondheim was discontinued, teaching of maritime archaeology was merged with historical archaeology. History was also an elemental part of the module in maritime history at the University of Helsinki.

Integration with archaeology is directly connected to teaching of skills and knowledge shared by archaeology and maritime archaeology. Archaeology programs in Finland have traditionally had specific concentrations in terms of research topics, and no real competition exists that might end up undermining the viability of any particular program. In Helsinki, archaeology has had a strong inclination towards Stone Age studies, especially the Mesolithic, and in this respect maritime, marine, underwater, and wetland archaeology might be tightly connected or beneficial to the interests of terrestrial archaeologists, both methodologically and thematically.

One focal point of archaeology at the University of Helsinki has been landscape, which is a natural thematic focus for maritime archaeology. The study of submerged landscapes can provide well-preserved palaeobotanical (seed, grain, and plant remains) and osteological (bone) materials, and in this respect the Baltic Sea in particular forms an important nexus that connects, for instance, maritime archaeology and the study of Neolithic pottery traditions (e.g. Holmqvist et al. 2018). The Baltic Sea is not only an archaeological concentration, but it also connects a number of research projects within and between institutions. The newly launched itämeri.fi website is one platform that showcases the widely connective potential of the topic, but more work should also be done in how maritime archaeology is portrayed to the public on such forums. The image of maritime archaeology in the society is a big responsibility, and this is why teaching of

maritime archaeology should also be integrated with heritage studies. The development of community archaeology projects in maritime contexts should be undertaken in collaboration with heritage studies.

Another concentration in archaeology at the University of Helsinki has been archaeological fieldwork and documentation. The existing infrastructure and expertise is a strong asset also when developing teaching in maritime archaeology.

When it comes to integrating maritime archaeology with the regulations and statements of the home institution, teaching should promote the four aims listed in the University of Helsinki strategy for 2021–2030 (University of Helsinki 2030):

- 1) Knowledge and learning are for everyone
- 2) Openness enhances scientific research and collaboration
- 3) Our University is the best place to study and work
- 4) Our University is a leader in responsibility and sustainability

In general, these strategic aims, and the lack of maritime archaeology programs in Finland, means that the curriculum should be as widely inclusive as possible. One big goal is therefore to introduce maritime archaeology at an early stage to bachelor students and in a way that promotes in an accessible manner a wide understanding of what maritime archaeology can be. To further this objective, an open introductory online course in maritime archaeology with the title *Perspectives in Maritime Archaeology* will be piloted in 2021. The development of the course began in June 2020. The course will be freely available in and outside of the institution, include a host of lecturers and topics, and aim to promote an inclusive understanding

of maritime archaeology, its history, theory, and methodology, research materials, and societal and environmental significance.

## **Suggestion for curriculum**

The here suggested curriculum for maritime archaeology follows the philosophy of integration outlined in the course of this report and is based on the current University of Helsinki archaeology curriculum. Through integration with existing teaching, the curriculum will contribute to the long-term success of the program, but it also aims to promote interdisciplinarity and national and international collaboration.

The master's degree program in maritime archaeology at University of Helsinki will have an inclusive concentration which seeks to promote a wide understanding of the discipline to a large base of bachelor students. At the University of Helsinki's Faculty of Arts, new students in the bachelor program for cultural studies enrol in the program rather than in individual disciplines. Basic level studies are common to all students, after which the students decide which of the eight disciplines of the program they want to choose as their concentration. Individual lectures in maritime archaeology are included in the basic studies and are a good opportunity to promote the discipline to a large base of new students. Master's degree studies in maritime archaeology will be available to students with an archaeology marking in their bachelor's degree diploma.

Understanding of the theory, methodology, and history of maritime archaeology will be promoted in the first year of master's degree studies. Seminars will be shared with archaeology and

skills in academic work will be learned in them. Practical skills should be taught at the end of the master program as optional studies and only to those students with a clear orientation towards the practical field, such as underwater excavation. The basic skills of archaeological fieldwork will be learned in shared courses with archaeology, and the methods and skills of maritime archaeology will be taught on specialised courses organised in collaboration with other institution. Additionally, the responsibility of both the commercial field and the heritage sector in providing necessary auxiliary training should be encouraged. Collaboration with the Finnish Heritage Agency and commercial companies will be developed to organise training for students but also to those who have already graduated and want to strengthen their practical skills needed in their jobs.

**Suggested Master's degree  
program in maritime archaeology  
at the University of Helsinki  
(120 ECTS points in total)**

**Compulsory advanced studies in maritime  
archaeology (75 ECTS points)**

Thematic studies (25 ECTS points)

- *Perspectives in Maritime Archaeology* (10 ECTS points). Introduction to the multidisciplinary of maritime archaeology. This course will be a web-based introductory module to maritime archaeology open to bachelor students as well as those not pursuing a master's degree in maritime archaeology. If the student has already taken this course as part of their bachelor's degree, they have to choose two courses from the module 'Optional studies in maritime archaeology'.
- *Theory, Methods, and Research History of Maritime Archaeology* (5 ECTS points). Advanced course in theory, methodology and history of maritime archaeology and how maritime archaeology developed and evolved.
- *Protection and Management of Maritime Cultural Heritage* (5 ECTS points). This course, developed in close contact with the Finnish heritage management sector, University of Helsinki cultural heritage studies, and University of Turku (Degree Programme in Cultural Production and Landscape Studies, Pori), will provide the student with



an understanding of the role of legislation, education, and tourism in the context of maritime cultural heritage.

- *Popularisation of Maritime Archaeology* (5 ECTS points, shared course with archaeology). The course aims to provide students with skills needed for the ethical dissemination of knowledge in public outreach and the promotion of environmental issues related to maritime archaeology.

Fieldwork (shared courses with archaeology)

- *Survey* (5 ECTS points)
- *Excavation* (5 ECTS points)

Thesis studies (shared courses with archaeology)

- *Seminar* (10 ECTS points). The topic of the student's master's thesis is chosen, research questions are defined, and the work is presented to others.
- *Thesis* (30 ECTS points)
- *Maturity Test* (0 ECTS points)

### **Optional studies in maritime archaeology (0–20 ECTS points according to interests)**

Maritime environment (possibly organised in collaboration with Leiden University)

- *Human and Maritime Environment in History and Prehistory* (5 ECTS points)
- *Maritime Environment and Landscape Research Methods* (5 ECTS points)

Maritime archaeology field methods (organised in collaboration with Hanko Summer University/University of Turku)

- *Survey and Documentation* (5 ECTS points)
- *Underwater Archaeology* (5 ECTS points)

**Other optional studies**  
**(25–45 ECTS points according to interests)**

Students of maritime archaeology may benefit from studies in, for example, archaeology, cultural heritage studies, maritime history, marine biology and marine resources, conservation, and museum studies.

# References

---

- Adams, J. 2001. Ships and boats as archaeological source materials. *World Archaeology* 32, 292–310.
- Adams, J. 2006. Editorial article: from the water margins to the centre ground. *Journal of Maritime Archaeology* 1, 1–8.
- Adams, J. 2007. Alchemy or science? Compromising archaeology in the deep sea. *Journal of Maritime Archaeology* 2, 48–56.
- Adams, J. 2008. Educating maritime archaeology: a postscript. *Journal of Maritime Archaeology* 3, 127–128.
- Adams, J. 2009. Comments on Keith Muckelroy: methods, ideas and *Maritime Archaeology*. *Journal of Maritime Archaeology* 4, 83–85.
- Aitchison, K. 2004. Supply, demand and a failure of understanding: addressing the culture clash between archaeologists' expectations for training and employment in 'academia' versus 'practice'. *World Archaeology* 36, 203–219.
- Aitchison, K. 2009. After the 'gold rush': global archaeology in 2009. *World Archaeology* 41, 659–671.
- Aitchison, K. 2013. Discovering the archaeologists of Europe. In *Training and Practice for Modern Day Archaeologists*, edited by J.H. Jameson & J. Eogan. Springer.
- Aitchison, K. & Edwards, R. 2003. *Archaeology Labour Market Intelligence: Profiling the Profession 2002/03*. Cultural Heritage National Training Organisation.
- Ballard, C., Bradley, R., Nordenborg Myhre, L. & Wilson, M. 2003. The ship as symbol in the prehistory of Scandinavia and Southeast Asia. *World Archaeology* 35, 385–403.

- Bangor 1992. Announcement. Degree of BA in history with nautical studies, University of Wales, Bangor, School of History and Welsh History. *International Journal of Nautical Archaeology* 21, 79–80.
- Bannerman, N. & Jones, C. 1999. Fish-trap types: a component of the maritime cultural landscape. *International Journal of Nautical Archaeology* 28, 70–84.
- Barstad, J.F. 2002. Underwater archaeology in the 20th century. Filling in the gaps. In *International Handbook of Underwater Archaeology*, edited by C.V. Ruppé & J.F. Barstad. Kluwer.
- Bass, G.F. 1966. *Archaeology Under Water*. Praeger.
- Bass, G.F. 2011. The development of maritime archaeology. In *The Oxford Handbook of Maritime Archaeology*, edited by B. Ford, D.L. Hamilton & A. Catsambis. Oxford University Press.
- Biesta, G. 2010. *Good Education in an Age of Measurement*. Paradigm.
- Broadwater, J.D. 2002. Timelines of underwater archaeology. In *International Handbook of Underwater Archaeology*, edited by C.V. Ruppé & J.F. Barstad. Kluwer.
- Carnell, E. 2007. Conceptions of effective teaching in higher education: extending the boundaries. *Teaching in Higher Education* 12, 25–40.
- Cederlund, C.O. 1995. Marine archaeology in society and science. *International Journal of Nautical Archaeology* 24, 9–13.
- Clarke, D. 1968. *Analytical Archaeology*. Methuen.
- Cohn, A.B. & Dennis, J.M. 2011. Maritime archaeology, the dive community, and heritage tourism. In *The Oxford Handbook of Maritime Archaeology*, edited by B. Ford, D.L. Hamilton & A. Catsambis. Oxford University Press.
- Cole, J. 2004. The new Centre for Maritime Archaeology at Oxford University. *International Journal of Nautical Archaeology* 33, 169–172.
- Colley, S. University-based archaeology teaching and learning and professionalism in Australia. *World Archaeology* 36, 189–202.

- Crumlin-Pedersen, O. & Thye, B.M. 1995. *The ship as symbol in prehistoric and medieval Scandinavia: papers from an international research seminar at the Danish National Museum, Copenhagen, 5th–7th May 1994*. Nationalmuseet, Copenhagen.
- Cummings, C. 1980 Conference on underwater archaeology. *International Journal of Nautical Archaeology* 8, 310.
- Davis, E.M. 2000. Archaeology education and the political landscape of American schools. *Antiquity* 74, 194–198.
- Delgado, J.P. 2000. Underwater archaeology at the dawn of the 21st century. *Historical Archaeology* 34, 9–31.
- Dellino-Musgrave, V. 2008. A journey through the library. *Journal of Maritime Archaeology* 3, 123–124.
- Dolwick, J.S. 2009. ‘The social’ and beyond: introducing Actor-Network Theory. *Journal of Maritime Archaeology* 4, 21–49.
- Dromgoole, S. 1999. A note on the meaning of ‘wreck’. *International Journal of Nautical Archaeology* 28, 319–322.
- Du Plat Taylor, J. (ed.) 1965. *Marine Archaeology: Developments During Sixty Years in the Mediterranean*. Hutchinson.
- Fan, W. & Yan, Z. 2010. Factors affecting response rates of the web survey: A systematic review. *Computers in Human Behavior* 26, 132–139.
- Firth, A. 1995. Three facets of maritime archaeology: society, landscape and critique. [<https://www.wessexarch.co.uk/sites/default/files/splash-import/wp-content/uploads/2010/04/Firth-1995-Three-Facets-of-Maritime-Archaeology-140410.pdf>]
- Firth, A. 2008. Education in maritime archaeology: an opinion. *Journal of Maritime Archaeology* 3, 125–126.
- Flatman, J. 2003. Cultural biographies, cognitive landscapes and dirty old bits of boat: ‘theory’ in maritime archaeology. *International Journal of Nautical Archaeology* 32, 143–157.

- Flatman, J. 2007a. The origins and ethics of maritime archaeology. *Public Archaeology* 6, 77–97.
- Flatman, J. 2007b. The origins and ethics of maritime archaeology. Part II. *Public Archaeology* 6, 163–176.
- Flatman, J. 2008. What ‘maritime archaeology’ are we teaching? A comment on ‘context’ and ‘setting’. *Journal of Maritime Archaeology* 3, 121–122.
- Flatman, J. 2011. *Becoming an Archaeologist: A Guide to Professional Pathways*. Cambridge University Press.
- Frost, H. 1963. *Under the Mediterranean: Marine Antiquities*. Routledge & Regan Paul.
- Ford, B. (ed.) 2011. *The Archaeology of Maritime Landscapes*. Springer.
- Forrest, C.J.S. 2002. Defining ‘underwater cultural heritage’. *International Journal of Nautical Archaeology* 31, 3–11.
- Gale, A. 1993. Hydroarchaeology: a subject framework. *International Journal of Nautical Archaeology* 22, 209–217.
- Gately, I. & Benjamin, J. 2018. Archaeology hijacked: addressing the historical misappropriations of maritime and underwater archaeology. *Journal of Maritime Archaeology* 13, 15–35.
- Gawronski, J. 1992. *Hollandia Compendium: A Contribution to the History, Archeology, Classification and Lexicography of a 150 ft. Dutch East Indiaman (1740–1750)*. Rijks Museum, Amsterdam.
- Geary, K. 2013. Over qualified and under skilled? Training and professional development in the UK. In *Training and Practice for Modern Day Archaeologists*, edited by J.H. Jameson & J. Eogan. Springer.
- Gibbins, D. & Adams, J. 2001. Shipwrecks and maritime archaeology. *World Archaeology* 32, 279–291.
- Goggin, J.M. 1960. Underwater archaeology: its nature and limitations. *American Antiquity* 25, 348–354.

- Gould, R.A. (ed.) 1983. *Shipwreck Anthropology*. University of New Mexico.
- Gribble, J. 2011. The UNESCO Convention on the Protection of the Underwater Cultural Heritage 2001. An impact review for the United Kingdom: project design. *Journal of Maritime Archaeology* 6, 77–86.
- Hamilakis, Y. 2004. Archaeology and the politics of pedagogy. *World Archaeology* 36, 203–319.
- Hamilakis, Y. 2015. Archaeology and the logic of capital: pulling the emergency break. *International Journal of Historical Archaeology* 19, 721–735.
- Harpster, M. 2009. Keith Muckelroy: methods, ideas and *Maritime Archaeology*. *Journal of Maritime Archaeology* 4, 67–82.
- Harris, L.B. & McKinnon, J.F. 2015. A job market and benchmarking survey of maritime archaeology. *ACUA Underwater Archaeology Proceedings* 2015, edited by M. Meniketti. Advisory Council on Underwater Archaeology.
- Hasslöf, O. 1972. Maritime ethnology and its associated disciplines. In *Ships and Shipyards, Sailors and Fishermen: Introduction to Maritime Ethnology*, edited by O. Hasslöf, H. Henningsen & A.E. Christensen JR. Copenhagen University Press.
- Henningsen, H. 1972. The life of the sailor afloat and ashore. Sources and systems of classification. In *Ships and Shipyards, Sailors and Fishermen: Introduction to Maritime Ethnology*, edited by O. Hasslöf, H. Henningsen & A.E. Christensen JR. Copenhagen University Press.
- Hoadley, U., Sehgal-Cuthbert, A., Barrett, B. & Morgan, J. 2019. After the knowledge turn? Politics and pedagogy. *The Curriculum Journal* 30, 99–104.
- Holmqvist, E. et al. 2018. Tracing grog and pots to reveal Neolithic Corded Ware Culture contacts in the Baltic Sea region (SEM-EDS, PIXE). *Journal of Archaeological Science* 91, 77–91.

- Hunter, J.R. 1994. 'Maritime culture': notes from the land. *International Journal of Nautical Archaeology* 23, 261–264.
- Ingold, T. 1993. The temporality of the landscape. *World Archaeology* 25, 152–174.
- Jasinski, M.E. & Søreide, F. 2008. Seven seas: maritime archaeology at the Norwegian University of Science and Technology. In *Collaboration, Communication and Involvement: Maritime Archaeology and Education in the 21st Century*, edited by A. Pydyn & J. Flatman. Nicolaus Copernicus University Press.
- Khalil, E. 2008. Education in maritime archaeology: the Egyptian case study. *Journal of Maritime Archaeology* 3, 85–91.
- Koivikko, M. 2017. *Recycling Ships. Maritime Archaeology of the UNESCO World Heritage Site, Suomenlinna*. University of Helsinki.
- Leone, M. 2013. Chapter 13. Mark Leone. In *Archaeology in the Making. Conversations through a Discipline*, edited by W.L. Rathje, M. Shanks & C. Witmore. Routledge.
- Linder, E. & McGrail, S. 1992. Maritime archaeology in universities. *International Journal of Nautical Archaeology* 21, 356.
- Linder, E. & McGrail, S. 1994. University courses in maritime archaeology. *International Journal of Nautical Archaeology* 23, 249.
- Maarleveld, T. 2007. *Maritime Archaeology. Identifying Identity. Inaugural Address Delivered on the Accession to the Chair of Maritime Archaeology at the University of Southern Denmark in Esbjerg on Wednesday 18 April 2007 by Thijs J. Maarleveld*. Maritime Archaeology Programme, University of Southern Denmark, Esbjerg.
- Maarleveld, T. & Auer, J. 2008. Present demands and educating a new generation of maritime archaeologists. *Journal of Maritime Archaeology* 3, 69–73.
- Manders, M.R. & Underwood, C.J. 2015. UNESCO field school on underwater cultural heritage: 2009–2011: Thailand capacity



- building in the Asian and Pacific Region. In *Shipwrecks Around the World: Revelations of the Past*, edited by S. Tripathi. Kaveri.
- Marila, M. & Ilves, K., under review. Maritime archaeology in Finland: history and future tasks. *Journal of Maritime Archaeology*.
- Markoulaki, P. 2009. Archaeological thinking and practice in maritime archaeology. *Journal of Maritime Archaeology* 4, 87.
- Marshall, Y. 2002. What is community archaeology? *World Archaeology* 34, 211–219.
- McGrail, S. 1992. Boat and ship archaeology at Roskilde – sixth meeting of ISBSA, 2–5 September 1991. A report. *International Journal of Nautical Archaeology* 21, 61–66.
- McGrail, S. 1995. Training maritime archaeologists. In *Shipsshape. Essays for Ole Crumlin-Pedersen*, edited by O. Olsen, J.S. Masden & F. Rieck. Viking Ship Museum.
- McGrail, S. 1997. *Studies in Maritime Archaeology*. British Archaeological Reports.
- Merimuseotoimikunta 1963. Merimuseotoimikunnan mietintö. Unpublished committee report. Ministry of Education.
- Merimuseotoimikunta 1965. Merimuseotoimikunnan mietintö 2 merimuseon sijoittamisesta Hylkysaaren luotsirakennukseen. Unpublished committee report. Ministry of Education.
- Meskel, L. 2018. *A Future in Ruins. UNESCO, World Heritage, and the Dream of Peace*. Oxford University Press.
- Muckelroy, K. 1978. *Maritime Archaeology*. Cambridge University Press.
- Muinaistieteellinen toimikunta 1968. Muinaistieteellisen toimikunnan toimintakertomus 1968. Unpublished annual report. Finnish Heritage Agency.
- Museovirasto 2019. *Suomen merellisen kulttuuriperinnön tilannekuvaus*. Finnish Heritage Agency.

- NAS 2009. *Benchmarking Competence Requirements and Training Opportunities related to Maritime Archaeology*. The Nautical Archaeology Society.
- O'Keefe, P.J. 1996. Protection of the underwater cultural heritage: developments at UNESCO. *International Journal of Nautical Archaeology* 25, 169–176.
- O'Neill, G. 2015. *Curriculum Design in Higher Education: Theory to Practice*. UCD Teaching & Learning.
- Parham, D. & Palma, P. 2008. Training and maritime archaeology in a university context. *Journal of Maritime Archaeology* 3, 59–68.
- Parham, D., Palma, P. & Merritt, O. 2008. Matching undergraduate education with marine archaeological research: Bournemouth University's BSc Marine Archaeology Program. In *Collaboration, Communication and Involvement: Maritime Archaeology and Education in the 21st Century*, edited by A. Pydyn & J. Flatman. Nicolaus Copernicus University Press.
- Parker, A.J. 1995. Maritime cultures and wreck assemblages in the Graeco-Roman world. *International Journal of Nautical Archaeology* 24, 87–95.
- Parker, A.J. 1999. A maritime cultural landscape: the port of Bristol in the Middle Ages. *International Journal of Nautical Archaeology* 28, 323–342.
- Parker, J. 2002. A new disciplinarity: communities of knowledge, learning and practice. *Teaching in Higher Education* 7, 373–386.
- Parker, J. 2003. Reconceptualising the curriculum: from commodification to transformation. *Teaching in Higher Education* 8, 529–543.
- Peach, S. 2010. A curriculum philosophy for higher education: socially critical vocationalism. *Teaching in Higher Education* 15, 449–460.
- Pydyn, A. & Flatman, J. (ed.) 2008. *Collaboration, Communication and Involvement: Maritime Archaeology and Education in the 21st Century*. Nicolaus Copernicus University Press.

- Quality Assurance Agency 2014. *Subject Benchmark Statement. Archaeology*. [[https://www.qaa.ac.uk/docs/qaa/subject-benchmark-statements/sbs-archaeology-14.pdf?sfvrsn=bcecf781\\_18](https://www.qaa.ac.uk/docs/qaa/subject-benchmark-statements/sbs-archaeology-14.pdf?sfvrsn=bcecf781_18)]
- Radic Rossi, R., Gaspari, A. & Pydyn, A. (ed.) 2008. *Proceedings of the 13th Annual Meeting of the European Association of Archaeologists (Zadar, Croatia, 18–23 September 2007), Session: Underwater Archaeology*. Croatian Archaeological Society.
- Rainbird, P. & Hamilakis, Y. (ed.) 2001. *Interrogating Pedagogies: Archaeology in Higher Education*. Archaeopress.
- Ransley, J. 2005. Boats are for boys: queering maritime archaeology. *World Archaeology* 37, 621–629.
- Ransley, J. 2007. Rigorous reasoning, reflexive research and the space for ‘alternative archaeologies’. Questions for maritime archaeological heritage management. *International Journal of Nautical Archaeology* 36, 221–237.
- Ransley, J. 2008. Time for a little pedagogical reflection? *Journal of Maritime Archaeology* 3, 53–58.
- Rey da Silva, A. & Herrera Tovar, J.M. 2017. Constructing America from the sea: maritime archaeology research, international cooperation and best practices in the underwater cultural heritage of Latin America. *Journal of Maritime Archaeology* 12, 149–162.
- Richards, N. 2006. Thematic studies in Australian maritime archaeology. In *Maritime Archaeology. The Springer Series in Underwater Archaeology*, edited by M. Staniforth & M. Nash. Springer.
- Rockman, M. & Flatman, J. (ed.) 2012. *Archaeology in Society. Its Relevance in the Modern World*. Springer.
- Satchell, J. 2008. Expanding informal education in maritime archaeology. *Journal of Maritime Archaeology* 3, 103–118.
- Schlanger, N. & Aitchison, K. (ed.) 2010. *Archaeology and the Global Economic Crisis. Multiple Impacts, Possible Solutions*. Culture Lab Editions.

- Scott, D. 2014. Knowledge and the curriculum. *The Curriculum Journal* 25, 14–28.
- Statistics Norway 2018. *Which students are most satisfied with the quality of teaching?* [<https://www.ssb.no/en/utdanning/artikler-og-publikasjoner/which-students-are-most-satisfied-with-the-quality-of-teaching>]
- Staniforth, M. 2008a. Strategies for teaching maritime archaeology in the twenty first century. *Journal of Maritime Archaeology* 3, 93–102.
- Staniforth, M. 2008b. Collaboration is the key: developing field and work skills in collaboration with government, museum and commercial underwater cultural heritage organizations. In *Proceedings of the 13th Annual Meeting of the European Association of Archaeologists (Zadar, Croatia, 18–23 September 2007), Session: Underwater Archaeology*, edited by R. Radic Rossi, A. Gaspari & A. Pydyn. Croatian Archaeological Society.
- Staniforth, M. 2009. Work-integrated learning in maritime archaeology: an Australian approach. *International Journal of Learning* 16, 519–528.
- Staniforth, M. 2010. Issues in education in maritime archaeology. In *Heritage 2010 – Heritage and Sustainable Development*, edited by R. Amoêda, S. Lira & C. Pinheiro. Green Lines Institute for Sustainable Development.
- Stewart, D.J. 2011. Preface: putting the wheels on maritime cultural landscape studies. In *The Archaeology of Maritime Landscapes*, edited by B. Ford. Springer.
- Sturt, F. 2008. Communities of knowledge: teaching and learning in maritime archaeology. *Journal of Maritime Archaeology* 3, 75–84.
- Tevali, R. 2012. Meriarkeologia Helsingin yliopistossa. Opintojen järjestäminen tulevaisuudessa. Unpublished research report.
- Throckmorton, P. 1965. *Diving for Treasure*. Thames & Hudson.
- Tilley, C. 1994. *A Phenomenology of Landscape. Places, Paths and Monuments*. Berg.

- Tuddenham, D.B. 2010. Maritime cultural landscapes, maritimity and quasi objects. *Journal of Maritime Archaeology* 5, 5–16.
- Tuddenham, D.B. 2012. Ship finds and their management as actor network. *Journal of Maritime Archaeology* 7, 231–243.
- Underwood, C.J. & Manders, M. 2019. Building knowledge and connections: the success of the UNESCO International Capacity Building Training Programmes for Cultural Heritage Management of Underwater Archaeological Sites. *Journal of Maritime Archaeology* 14, 333–354.
- UNESCO 2010. *Courses in Underwater Archaeology at Universities and other Institutions*. [<https://unesdoc.unesco.org/ark:/48223/pf0000151452.locale=en>]
- University of Helsinki 2018. *Regulations of the University of Helsinki*. [[https://www.helsinki.fi/sites/default/files/atoms/files/2018\\_27\\_hy-johtosaanto\\_2018\\_en.pdf](https://www.helsinki.fi/sites/default/files/atoms/files/2018_27_hy-johtosaanto_2018_en.pdf)]
- University of Helsinki 2019. *University of Helsinki Faculty of Arts career monitoring report – master's graduates of 2003–2013*. [[https://guide.student.helsinki.fi/sites/default/files/inline-files/05\\_Arts\\_2003\\_2013\\_masters.pdf](https://guide.student.helsinki.fi/sites/default/files/inline-files/05_Arts_2003_2013_masters.pdf)]
- University of Helsinki 2030. *Strategic plan of the University of Helsinki 2021–2030*. [[https://www.helsinki.fi/sites/default/files/atoms/files/hy2030\\_strategia\\_en.pdf](https://www.helsinki.fi/sites/default/files/atoms/files/hy2030_strategia_en.pdf)]
- Van Mol, C. 2017. Improving web survey efficiency: the impact of an extra reminder and reminder content on web survey response. *International Journal of Social Research Methodology* 20, 317–327.
- Weski, T. 1996. Conference report: first meeting of the European Association of Archaeologists. *International Journal of Nautical Archaeology* 25, 152.
- Westerdahl, C. 1992. The maritime cultural landscape. *International Journal of Nautical Archaeology* 21, 5–14.

- Westerdahl, C. 2005. Seal on land, elk at sea: notes on and applications of the ritual landscape at the seaboard. *International Journal of Nautical Archaeology* 34, 2–23.
- Westerdahl, C. 2011. The binary relationship of sea and land. In *The Archaeology of Maritime Landscapes*, edited by B. Ford. Springer.
- Wickham-Jones, C.R. 2018. *Landscape Beneath the Waves: The Archaeological Exploration of Underwater Landscapes*. Oxbow.
- Willems, A. et al. 2018. Teaching archaeological heritage management. Towards a change in paradigms. *Conservation and Management of Archaeological Sites* 20, 297–318.